SR320/SR320L
SR325/SR325L

marantz®

model SR320/SR320L/SR325/SR325L

Stereophonic Receiver

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, MARANTZ Company has created the ultimate in stereo sound. Only original MARANTZ parts can insure that your MARANTZ product will continue to perform to the specifications for which it is famous.

Parts for your MARANTZ stereo are generally available within 72 hours throughout the nation via a toll-free line to our National Parts Depot in California. The sales professionals who take your call immediately refer to their own desk top computer terminal and can quickly determine the availability and price information you require. If, for some reason, your order should exceed our available stock, we usually can instantly provide an alternate replacement part or current delivery information. When the order is placed and confirmed, the computer simultaneously generates "hard copy" orders at the distribution center. As hard copies come directly from the computer to the national parts depot, your requested stock is assembled and prepared for shipment and placed on the first available carrier for delivery to you.

ORDERING PARTS

Phone orders will eliminate mail delays, and we encourage the use of this method. If you order by mail, use MARANTZ parts order froms which are available from our National Parts Depot located at the following address:

SUPERSCOPE NATIONAL PARTS DEPARTMENT
20525 Nordhoff Street
Chatsworth, California 91311
Phone: 1-800-423-5108
1-213-998-9333

The following information must be supplied to eliminate delays in processing your order:

1. Complete address.
2. Complete part numbers.
3. Complete description of parts.
4. Model number for which part is required (indicate MARANTZ).
5. Account number (for account customers only).

Direct consumers will be provided with the current retail price quotation on available parts in order to advise them of the cost of the parts and shipping.

OVERSEAS PARTS ORDERING

Parts may also be ordered from the following overseas addresses:

U.S.A.

MARANTZ COMPANY, INC.
National Service Dept.
P.O. Box 577
Chatsworth, CA 91311
U.S.A.

CANADA

SUPERSCOPE CANADA, LTD.
3710 Nashua Drive
Mississauga
Ontario, Canada L4V1M5

AUSTRALIA

MARANTZ AUSTRALIA
32 Cross Street
Brookvale, NSW 2100
Australia

JAPAN

MARANTZ JAPAN, INC.
3622 Kamitsuruma
Sagamihara-shi
Kanagawa, Japan

EUROPE

MARANTZ S.A.
326 Avenue Louise Bte 32
1050 Brussels
Belgium

MARANTZ AUDIO U.K. LTD.
Unit 15/16
Saxon Way Industrial Estate
Motor Lane
Harmondsworth UB7 OLW
Great Britain

MARANTZ BELGIUM
45 Rue Auguste Van Zande
1080 Brussels
Belgium

MARANTZ SVENSKA A.B.
Svartviksvangen 56
Traneberg
Box 12016
161 12 BROMMA
SWEDEN

MARANTZ GERMANY GMBH
Max-Planckstrasse 22
6072 Dreieich 1
West Germany

MARANTZ FRANCE
4 Rue Bernard Palissy
92600 Asnieres
France

MARANTZ GMBH AUSTRIA
Wiedner Hauptstrasse 98
1050 WIEN
AUSTRIA

MARANTZ NORSKE A.S.
Refstadalleen 13
Oslo 5
Norway

MARANTZ DENMARK
Bregnerødvej 132b
3460 BIRKERØD
DENMARK

All of the above locations are fully equipped to take care of your total service needs. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please contact the nearest facility for the necessary assistance.

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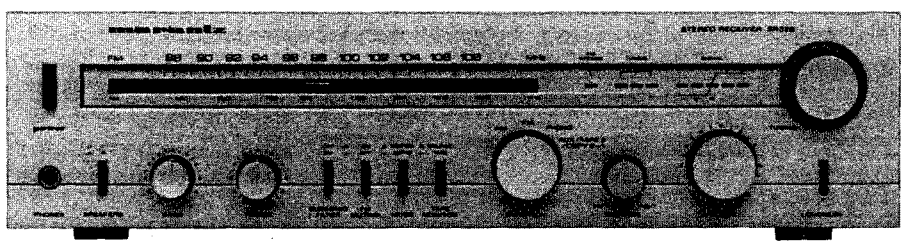
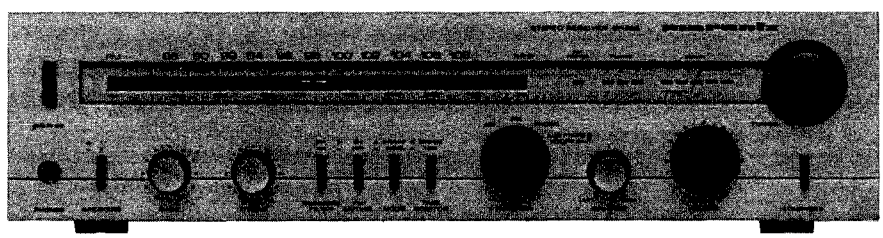
TABLE OF CONTENTS

Section		Page
	INTRODUCTION	1
1.	SHOCK, FIRE HAZARD SERVICE TEST	1
2.	P.W. BOARDS	1
3.	TEST EQUIPMENT REQUIRED FOR SERVICING	1
4.	ALIGNMENT PROCEDURES	3
5.	VOLTAGE CONVERSION	5
6.	BLOCK DIAGRAM	6
7.	DIAGRAM AND COMPONENT LOCATIONS	7
7.1	Tuner/Main/Power (P100) and Tone Volume (PE00) Schematic Diagram and Component Locations	7
7.2	Fuse (PP00) Schematic Diagram and Component Locations	10
7.3	Speaker Terminal (PW51) Schematic Diagram and Component Locations	10
7.4	L.E.D. Meter (PX01) Schematic Diagram and Component Locations	11
7.5	Phono Amp. (P400) Schematic Diagram and Component Locations	12
7.6	Tape Monitor Switch (PS00) Schematic Diagram and Component Locations	12
7.7	Head Phone (PW00) Schematic Diagram and Component Locations	12
7.8	Speaker Switch (PS51) Schematic Diagram and Component Locations	12
7.9	Power Switch (PU00) Schematic Diagram and Component Locations	12
7.10	DE-Emphasis Switch (PC51) Schematic Diagram and Component Locations	12
8.	EXPLODED VIEW AND PARTS LIST	13
9.	TECHNICAL SPECIFICATIONS	24
10.	SCHEMATIC DIAGRAM	26

MODEL SR320/SR320L STEREOPHONIC RECEIVER



MODEL SR325/SR325L STEREOPHONIC RECEIVER



INTRODUCTION

This service manual was prepared for use by Authorized Warranty Stations and contains service information for Marantz Model SR320/SR320L and SR325/SR325L Stereophonic Receiver.

Servicing information and voltage data included in this manual are intended for use by the knowledgeable and experienced technician only. All instructions should be read carefully. No attempt should be made to proceed without a good understanding of the operation of the receiver.

The parts list furnishes information by which replacement parts may be ordered from the Marantz Company. A simple description is included for parts which can usually be obtained through local suppliers.

1. SHOCK FIRE HAZARD SERVICE TEST

CAUTION : After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or front Panel of product and controls and chassis bottom.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verfied before return to user/customer,

Ref. UL Standard NO. 1270. Para. 66. 3. D (Mandatory Test after servicing Electrical Appliances, effective 7-1-83).

2. P.W. BOARDS

As can be seen from the circuit diagram the chassis of Model SR320/SR320L and SR325/SR325L consists of the following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

1. Tuner/Main Amp/ Power Supply . . . . . mounted on P.W. Board P100
2. Speaker Terminal . . . . . mounted on P.W. Board PW51
3. Tuning LED . . . . . mounted on P.W. Board PX00
4. Power Switch . . . . . mounted on P.W. Board PU00
5. Phono Amp . . . . . mounted on P.W. Board P400
6. Head Phone Jack . . . . . mounted on P.W. Board PW00
7. Tape Monitor Switch . . . mounted on P.W. Board PS00
8. Tone Control . . . . . mounted on P.W. Board PE00
9. Speaker Switch . . . . . mounted on P.W. Board PS51
10. Fuse . . . . . mounted on P.W. Board PP00 (SR325/SR325L)
11. DE-Emphasis Switch . . . . mounted on P.W. Board PC51 [SR320/SR325 (E) only.]

3. TEST EQUIPMENT REQUIRED FOR SERVICING

This table lists the test equipment required for servicing the Model SR320/SR320L and SR325/SR325L Receiver.

Item	Manufacturer and Model No.	Use
AM Signal Generator		Signal source for AM alignment
Test Loop		Use with AM Signal Generator
FM Signal Generator MPX Signal Generator	Sound Technology Model 1000A	Signal source for FM alignment Stereo separation alignment and trouble shooting
Distortion Analyzer Audio Oscillator AC VTVM	Sound Technology Model 1700A	Distortion measurements Sinewave and squarewave signal source Voltage measurements (AC)
Oscilloscope	Tektronix Model T932 Philips Model 3232	Waveform analysis and trouble shooting and ASO alignment
Frequency Counter	Fluke Model 1900A	ASO alignment
Circuit Tester		Trouble shooting
DC VTVM	Fluke Model 8000 "Digital" Simpson Model 313, Triplet Model 801	Voltage measurements (DC)
AC Wattmeter	Simpson Model 1379	Monitors primary power to amplifier
AC Ammeter	Commercial Grade (1-10A)	Monitors amplifier output under short circuit condition
Line Voltmeter	Simpson Model 1359	Monitors potential of primary power to amplifier
Variable Autotransformer	Superior Electronic Co., Powerstat Model 116B-10A	Adjusts level of primary power to amplifier
Shorting Plug	Use phono plug with 600-ohm across center pin and shell	Shorts amplifier input to eliminate noise pickup
Output Load (8 ohms, ±0.5%, 100W)	Commercial Grade	Provides 8-ohm load for amplifier output termination
Output Load (4 ohms, ±0.5%, 100W)	Commercial Grade	Provides 4-ohm load for amplifier output termination

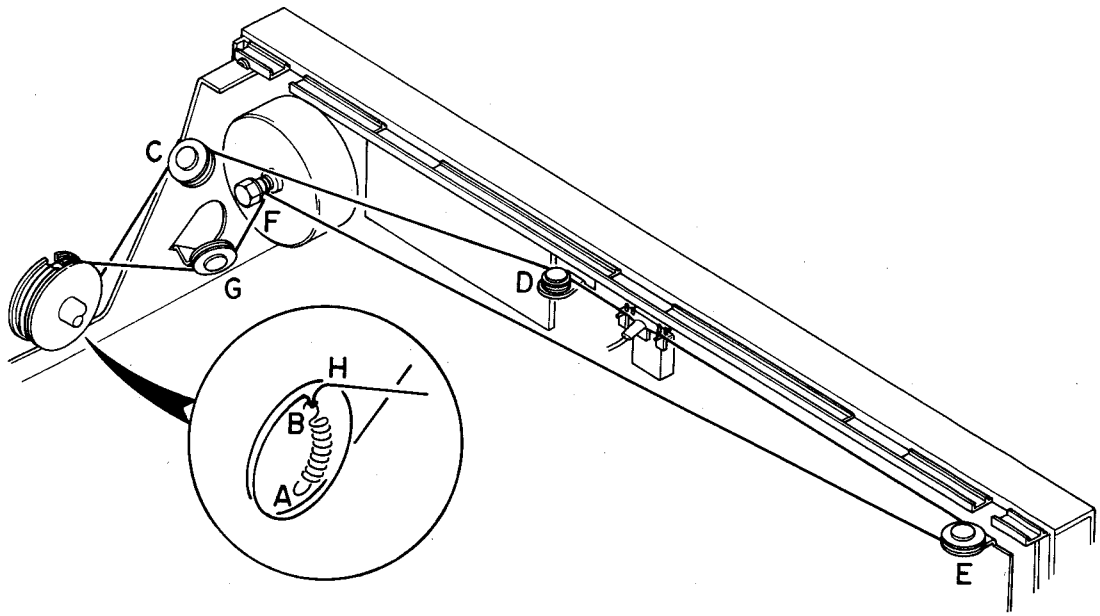


Figure 1. Dial Stringing

SR320/SR320L MAIN P.W.B. YK117H10A0
SR325/SR325L MAIN P.W.B. YK117H10A0

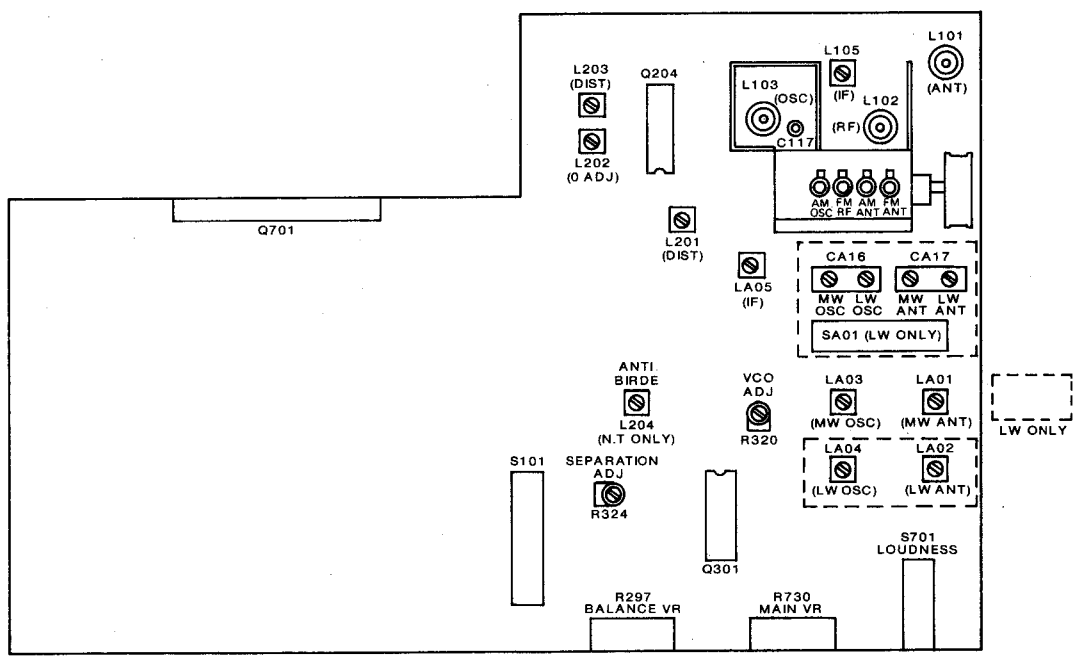


Figure 2. Adjustment Point Locations

4. ALIGNMENT PROCEDURES

A dummy resistor of 47 k-ohms must be connected across the tuner output terminals before alignment.

4.1 FM Alignment Procedures (Function switch in the "FM" position)

FM RF Alignment

Step	Signal Source Connection	Signal Frequency	Indicator Connection	Set Dial Pointer to:	Adjust
1	RF generator to FM antenna terminals through matching network. (300 ohms, balanced) (Maintain RF level below limit.)	87.4 MHz	VTVM to L or R channel output.	Tuning capacitor minimum closed.	L103 for maximum output.
2		108.2 MHz		Tuning capacitor maximum open.	C117 for maximum output.
3		90 MHz		90 MHz	L101, L102 for maximum output.
4		106 MHz		106 MHz	ANT. RF. TRIM. CAP. for maximum output.
5	Repeat steps 1 to 4.				
6	Check overall response curve and repeat above steps as necessary to obtain maximum sensitivity.				
7	No connection.	No signal.	"0" center meter or DC current meter in 100 μA range between J201 and J202.		L202 primary core so that the meter indicates its center or may read "0". (BLK core)
8	RF generator 1 mV (or 300 μV, only Step 10) output to FM antenna terminals through matching network. (300 ohms, balanced)	98 MHz	Distortion meter to L or R channel output.	98 MHz	L203 Secondary core (BLK) for minimum distortion. (WHI)

4.2 Multiplex Alignment Procedures (Function switch in the "FM" position/Mode switch in the "STEREO" position)

Step	Signal Source Connection	Signal Frequency	Indicator Connection	Set Dial Pointer to:	Adjust
1	RF generator to FM antenna terminals through matching network. (300 ohms, balanced), with 1 mV FM stereo simulator RF level and 100% modulation (pilot 9%)	No Modulation.	Frequency counter to J301.	98 MHz	R304 so that Frequency counter may precisely read 76 kHz.
2		Stereo, left (1,000 Hz)	VTVM to right channel output.		R331 for maximum output and same separation in both channels.
3		Stereo right (1,000 Hz)	VTVM to left channel output.		

4.3 AM Alignment Procedures (Function switch in the "AM" position)

1. AM IF Alignment

Step	Signal Source Connection	Signal Frequency	Indicator Connection	Set Dial Pointer to:	Adjust
1	Sweep generator to OSC Variable Cap.	450 kHz marker	Oscilloscope to T.P.	Quiet point on band.	LA05 & L201 for maximum and symmetric response.

2. AM RF Alignment (MW)

Step	Signal Source Connection	Signal Frequency	Indicator Connection	Set Dial Pointer to:	Adjust
1	Apply the signal to the AM loop antenna from the RF generator, using the test loop, as per the Figure 3.	520 kHz	VTVM to L or R channel output.	Tuning capacitor minimum closed.	LA03 for maximum output.
2		1,630 kHz		Tuning capacitor maximum open.	OSC. TRIM. CAP. for maximum output.
3		600 kHz		600 kHz	LA01 for maximum output. (U Version) LB01 for maximum output. (N.E.P. Version)
4		1,400 kHz		1,400 kHz	ANT. TRIM. CAP. for maximum output.
5	Repeat steps 1 to 4 as necessary to obtain maximum sensitivity.				

3. AM RF Alignment (LW) SR320L and SR325L only

Step	Signal Source Connection	Signal Frequency	Indicator Connection	Set Dial Pointer to:	Adjust
1	Apply the signal to the AM loop antenna from the RF generator, using the test loop, as per the Figure 3.	145 kHz	VTVM to L or R channel output.	Tuning capacitor minimum closed.	LA04 for maximum output.
2		380 kHz		Tuning capacitor maximum open.	OSC. TRIM. CAP. (CA16) for maximum output.
3		170 kHz		170 kHz	LA02 for maximum output.
4		350 kHz		350 kHz	ANT. TRIM. CAP. (CA17) for maximum output.
5	Repeat steps 1 to 4 as necessary to obtain maximum sensitivity.				

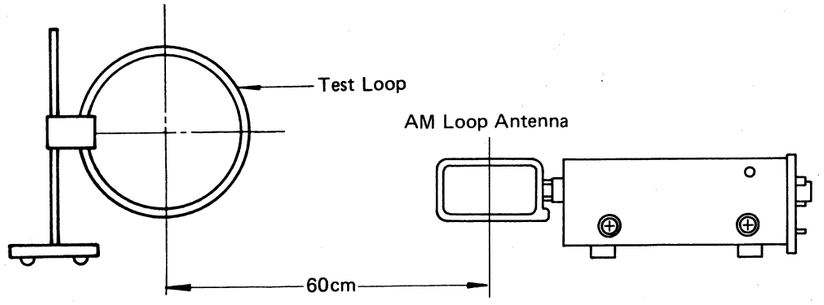
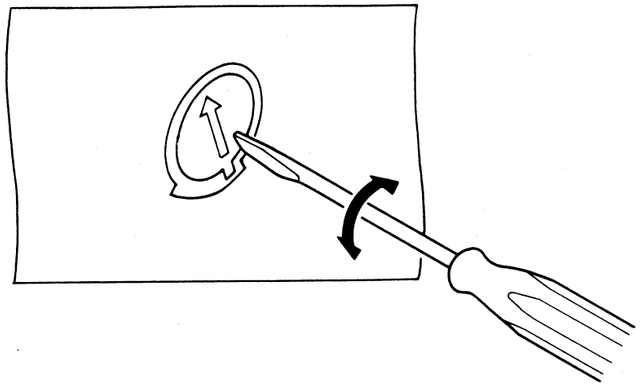


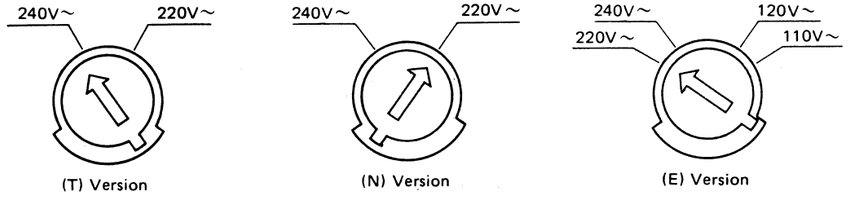
Figure 3. Application of AM Signal

5. VOLTAGE CONVERSION

To convert the unit to a different power source voltage, change the position as illustrated in the drawing below.

CAUTION: DISCONNECT POWER SUPPLY CORD FROM AC OUTLET BEFORE CONVERTING VOLTAGE. DO NOT DISASSEMBLE THE VOLTAGE SELECTOR ABSOLUTELY.





NOTE ON SAFETY:
Symbol ⚠ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol ⚠ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

FTZ REGULATION

Instruction for the use in the range other than specified in FTZ codes.

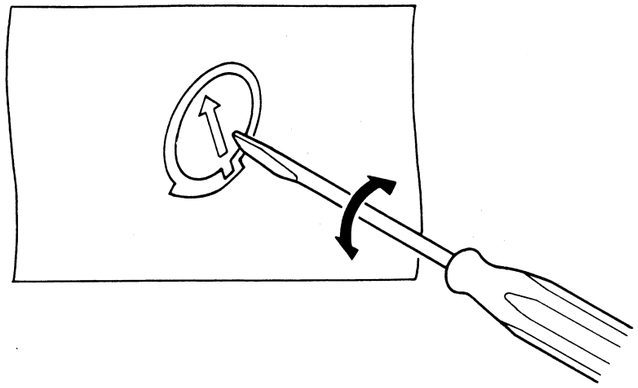
Achtung für die Leute, die in dem Gebiet wohnen, wo die FTZ-Bestimmungen vorherschend sind.

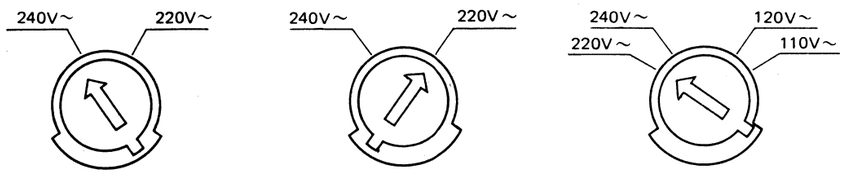
Sollte das Gerät auch für Frequenzen auszerhalb des in den FTZ-Bestimmungen angegebenen Bereiches empfangebereit sein, bitten wir, den Bereich durch Nachstellen des Kernes in der Oszillatorspule (in der Abbildung mit "FTZ" gekennzeichnet) so zu korrigieren, dass er den Bestimmungen entspricht.

5. VOLTAGE CONVERSION

To convert the unit to a different power source voltage, change the position as illustrated in the drawing below.

CAUTION: DISCONNECT POWER SUPPLY CORD FROM AC OUTLET BEFORE CONVERTING VOLTAGE. DO NOT DISASSEMBLE THE VOLTAGE SELECTOR ABSOLUTELY.





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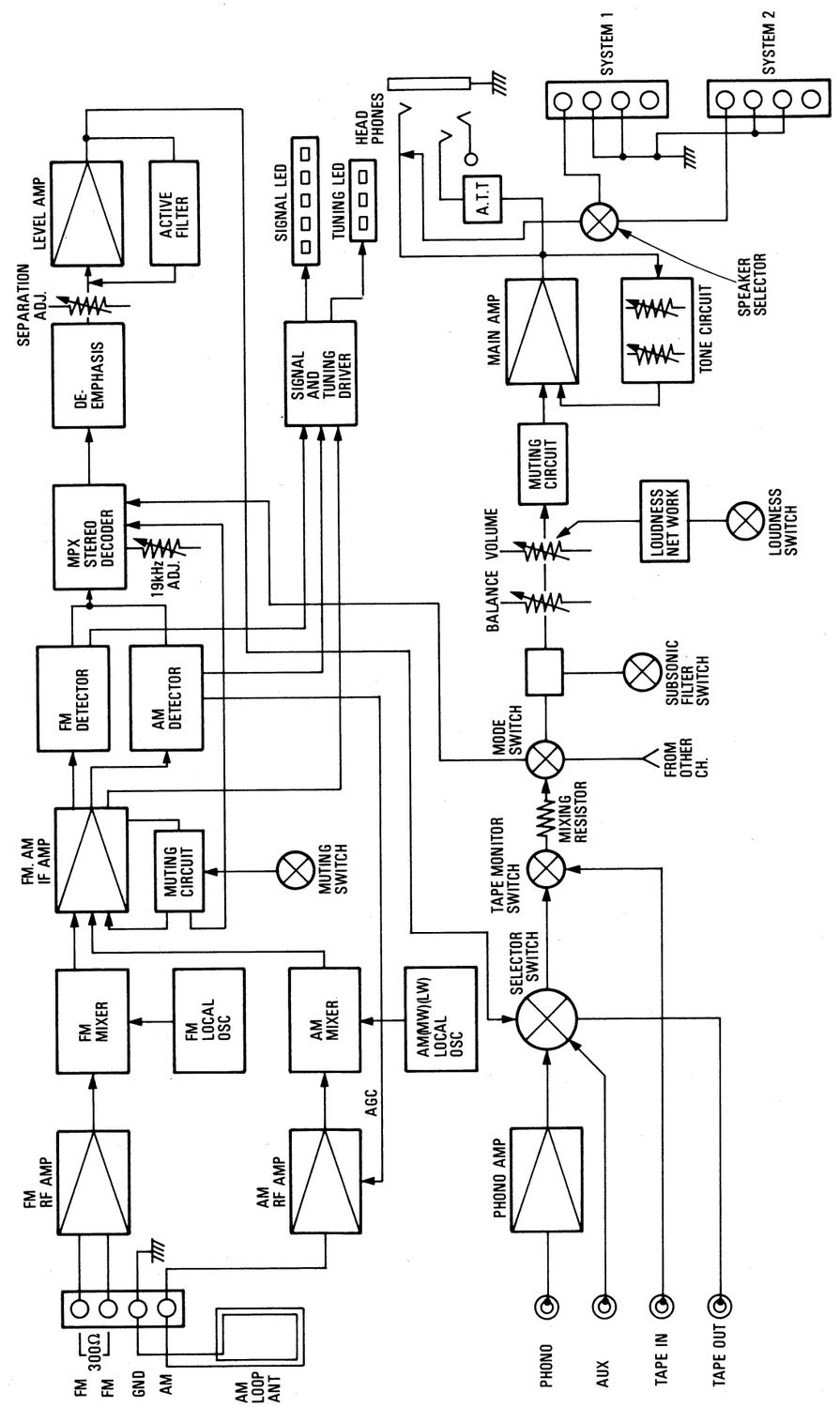
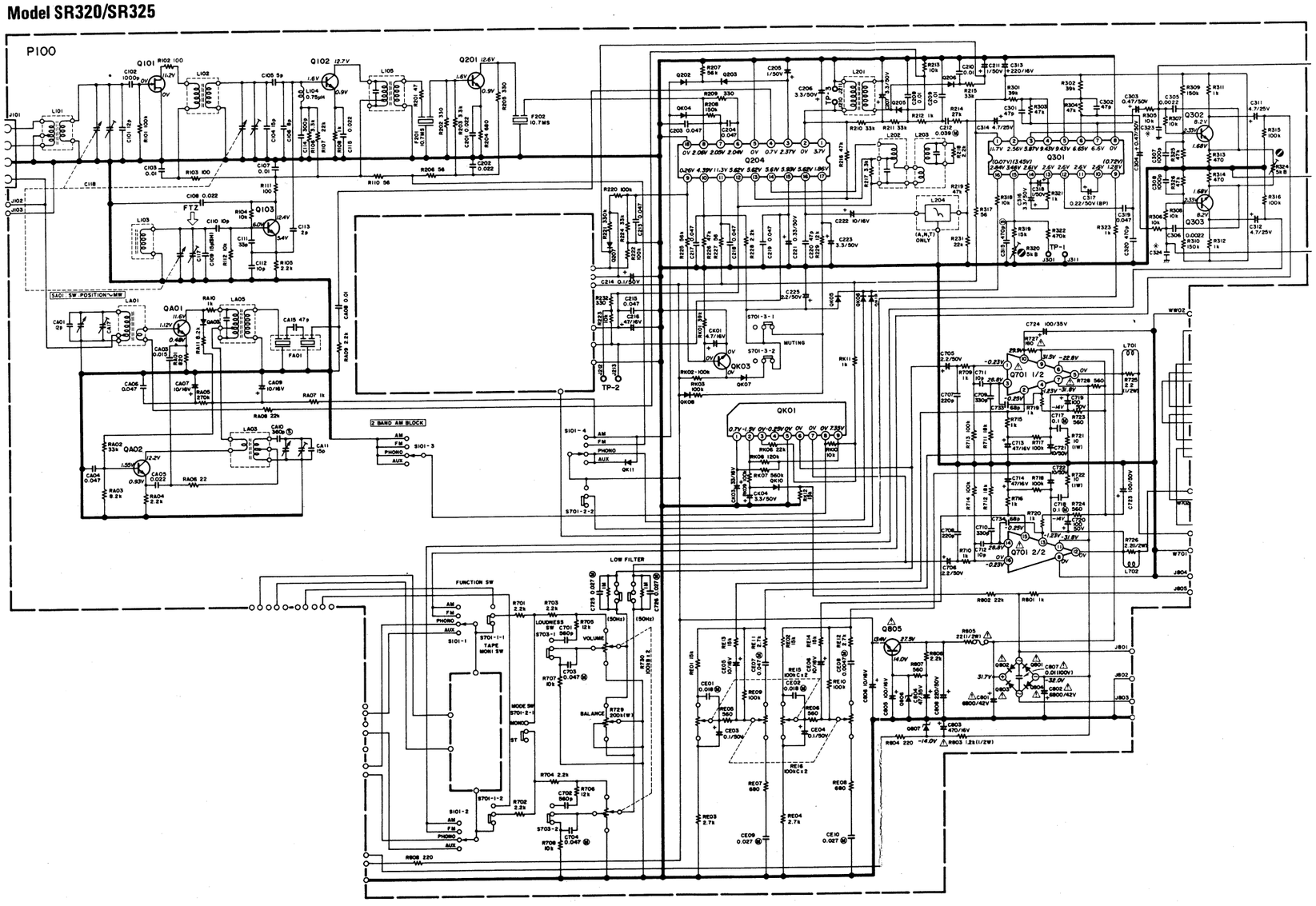
6. BLOCK DIAGRAM



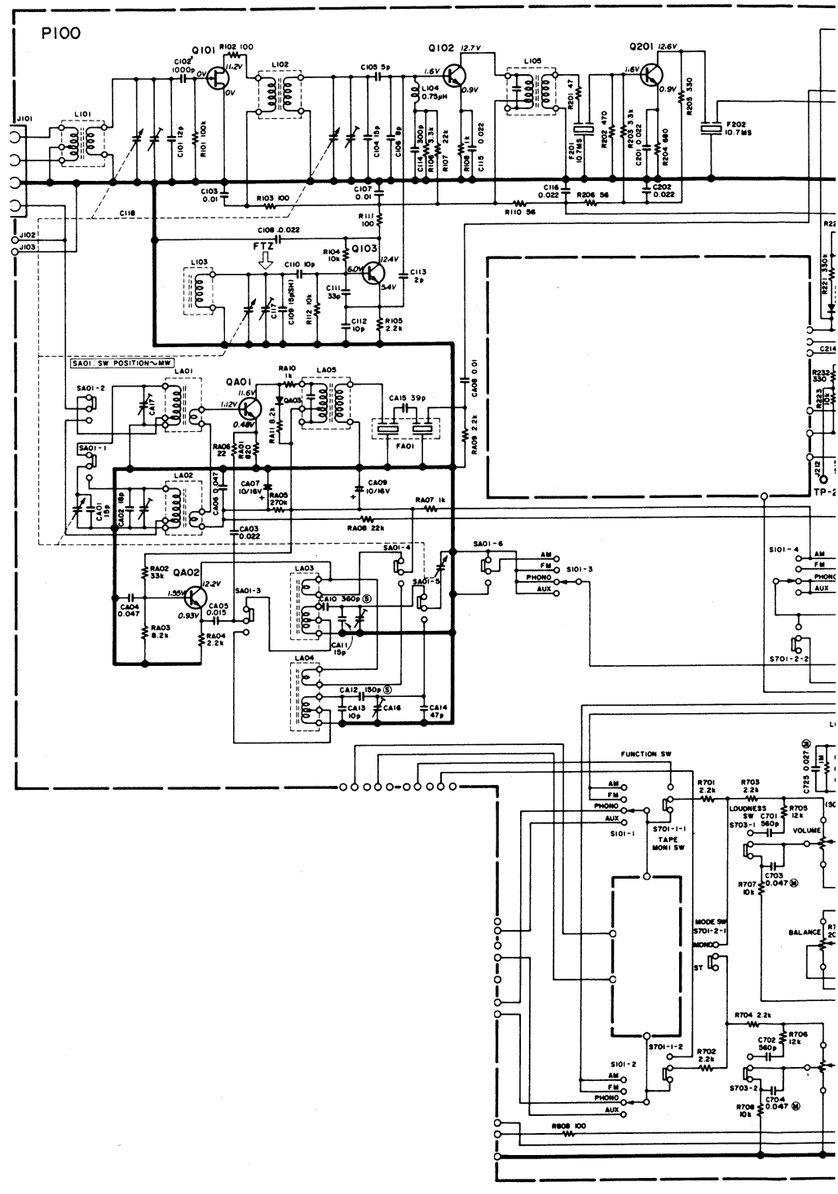
7. DIAGRAM AND COMPONENT LOCATIONS

7.1 Tuner/Main/Power (P100) and Tone Volume (PE00) Schematic Diagram and Component Locations

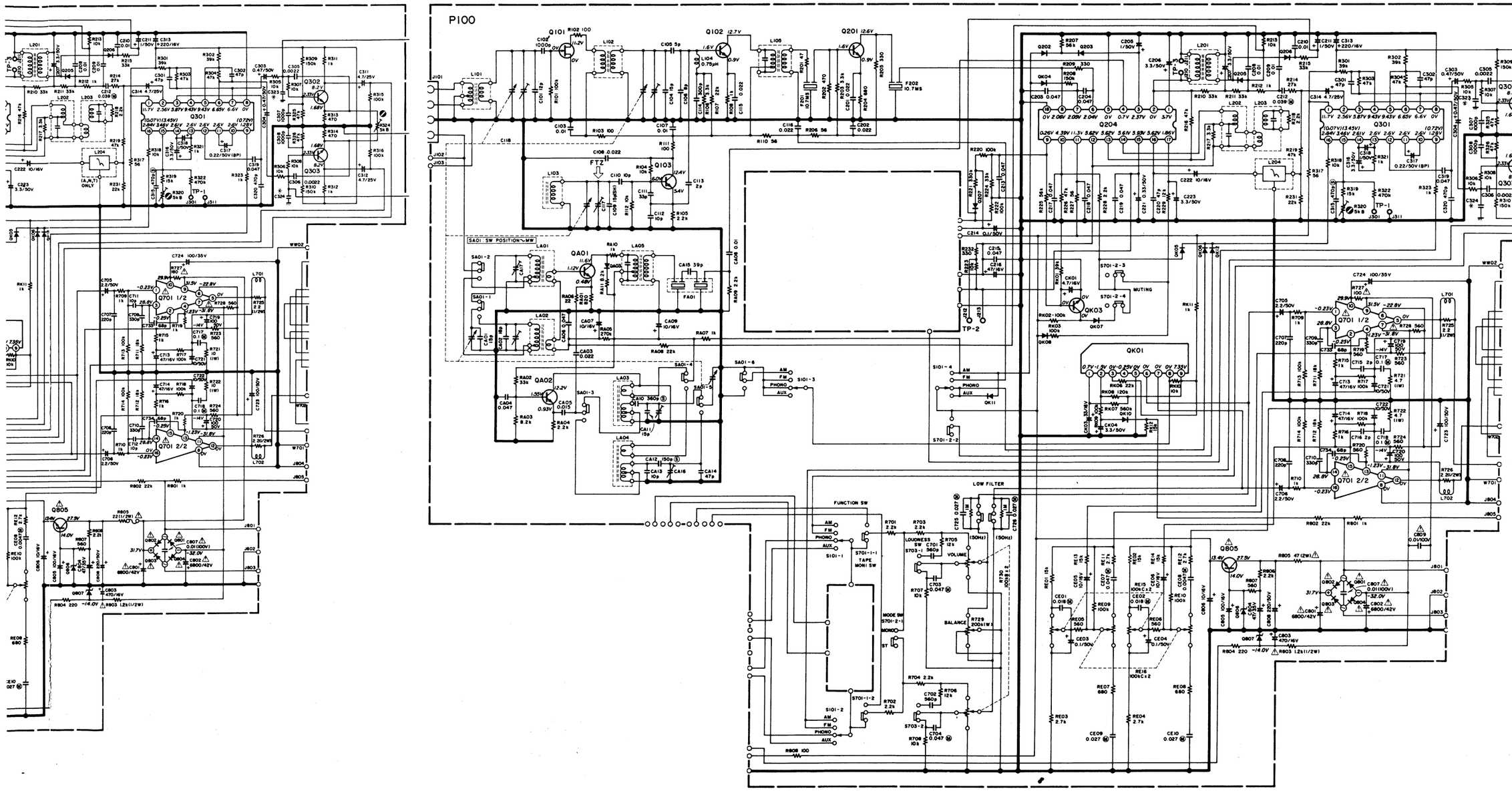
Model SR320/SR325

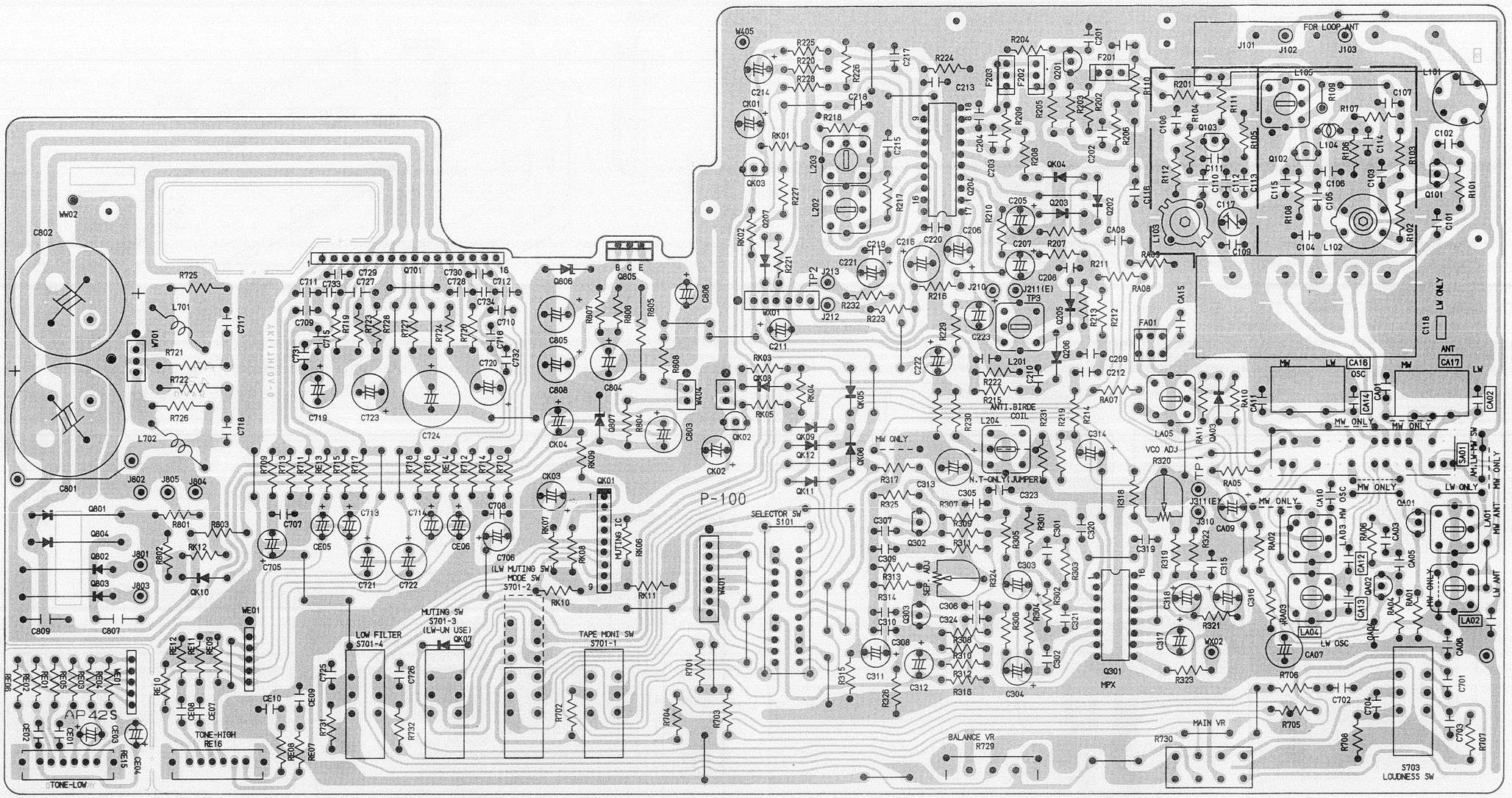


Model SR320L/SR325L



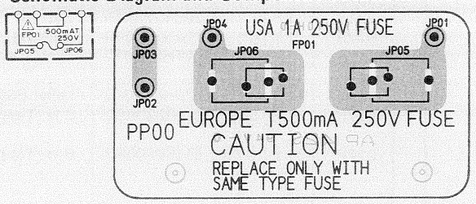
Model SR320L/SR325L





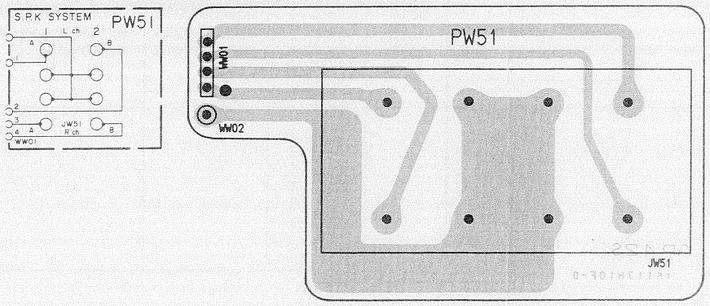
7.2 Fuse (PP00)

Schematic Diagram and Component Locations

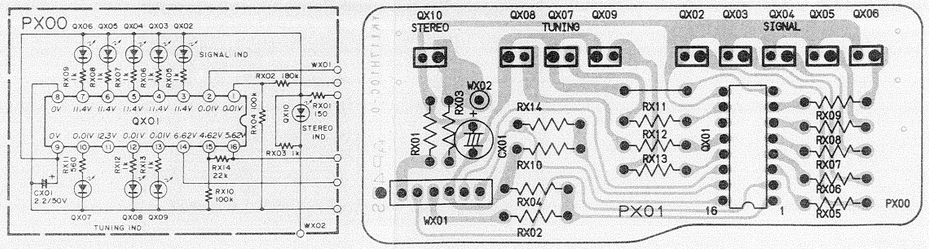


7.3 Speaker Terminal (PW51)

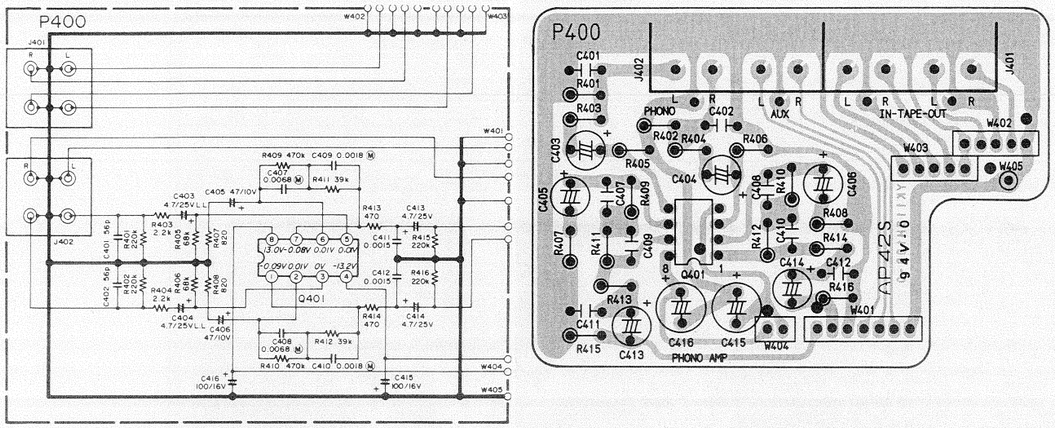
Schematic Diagram and Component Locations



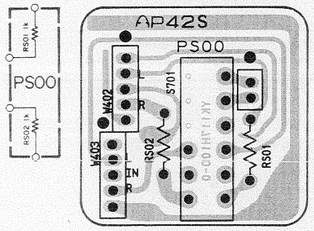
7.4 L.E.D. Meter (PX01) Schematic Diagram and Component Locations



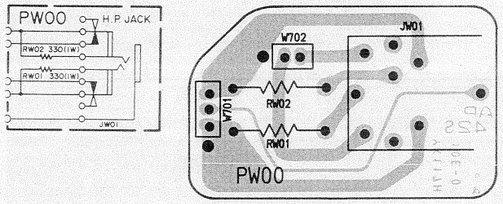
7.5 Phono Amp. (P400) Schematic Diagram and Component Locations



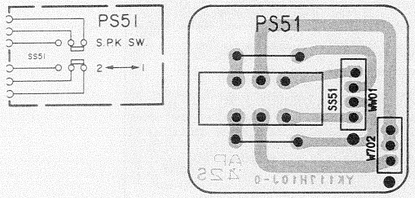
7.6 Tape Monitor Switch (PS00)
Schematic Diagram and Component Locations



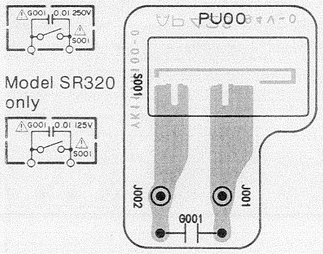
7.7 Head Phone (PW00)
Schematic Diagram and Component Locations



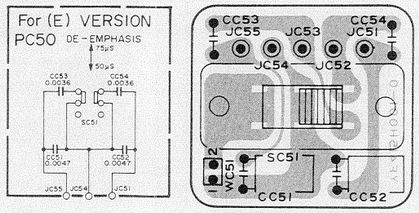
7.8 Speaker Switch (PS51)
Schematic Diagram and Component Locations



7.9 Power Switch (PU00)
Schematic Diagram and Component Locations

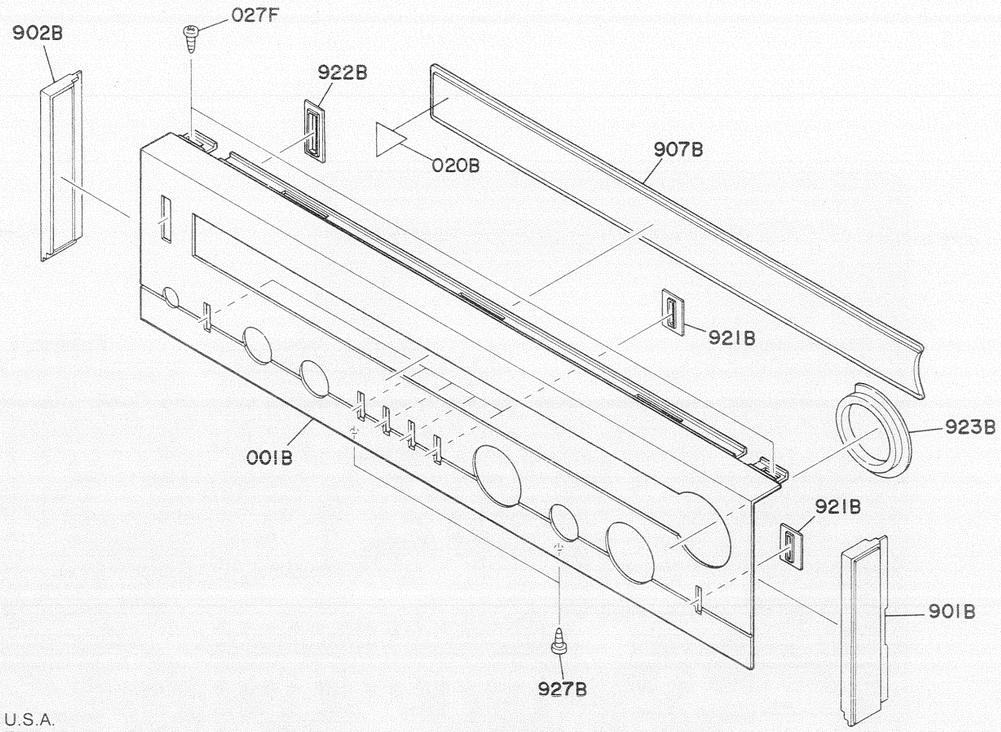


7.10 DE-Emphasis Switch (PC51)
Schematic Diagram and Component Locations



8. EXPLODED VIEW AND PARTS LIST

8.1 [C01-99] Front Panel

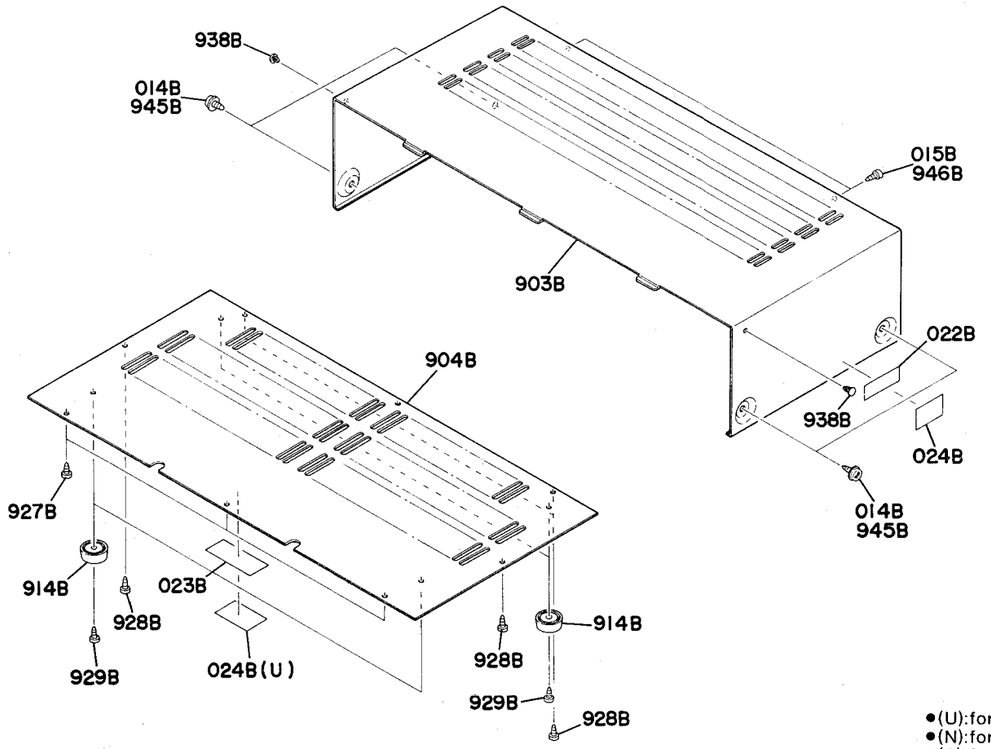


- (U):for U.S.A.
- (N):for Europe
- (A):for Australia
- (E):for Europe

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
						(SR320, ONLY)
A	1				117H063400	Front Panel Assembly
A1		1	1	1	117H063410	Front Panel Assembly
001B	1				117H063010	Escutcheon Front Panel
001B		1	1	1	117H063020	Escutcheon Front Panel
901B	1	1	1	1	117H067010	Cap Right Side
902B	1	1	1	1	117H067020	Cap Left Side
907B	1	1	1	1	117H158010	Window
921B	6	6	6	6	208H259010	Bushing Push SW.
922B	1	1	1	1	114H259220	Bushing Power SW.
923B	1	1	1	1	117H353010	Ring Tuning
						(SR320L, ONLY)
A		1			118H063400	Front Panel Assembly
001B		1			118H063010	Escutcheon Front Panel
901B		1			117H067010	Cap Right Side
902B		1			117H067020	Cap Left Side
907B		1			117H158010	Window
921B		6			208H259010	Bushing Push SW.
922B		1			114H259220	Bushing Power SW.
923B		1			117H353010	Ring Tuning

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
						(SR325, ONLY)
A	1	1	1	1	121H063400	Front Panel Assembly
001B	1	1	1	1	121H063010	Escutcheon Front Panel
901B	1	1	1	1	117H067030	Cap (Right)
902B	1	1	1	1	117H067040	Cap (Left)
907B	1	1	1	1	117H158010	Window
921B	6	6	6	6	208H259010	Bushing Push SW.
922B	1	1	1	1	114H259220	Bushing Power SW.
923B	1	1	1	1	117H353010	Ring Tuning Knob
						(SR325L, ONLY)
A		1			122H063400	Front Panel Assembly
001B		1			122H063010	Escutcheon Front Panel
901B		1			117H067030	Cap (Right)
902B		1			117H067040	Cap (Left)
907B		1			117H158010	Window
921B		6			208H259010	Bushing Push SW.
922B		1			114H259220	Bushing Power
923B		1			117H353010	Ring Tuning Knob
020B	1				105H861010	Label ESC (SR325)
927B	2	2	2	2	51280308B0	B.H. Tapped Screw B3 x 8
027F	2	2	2	2	51280308B0	B.H. Tapped Screw B3 x 8

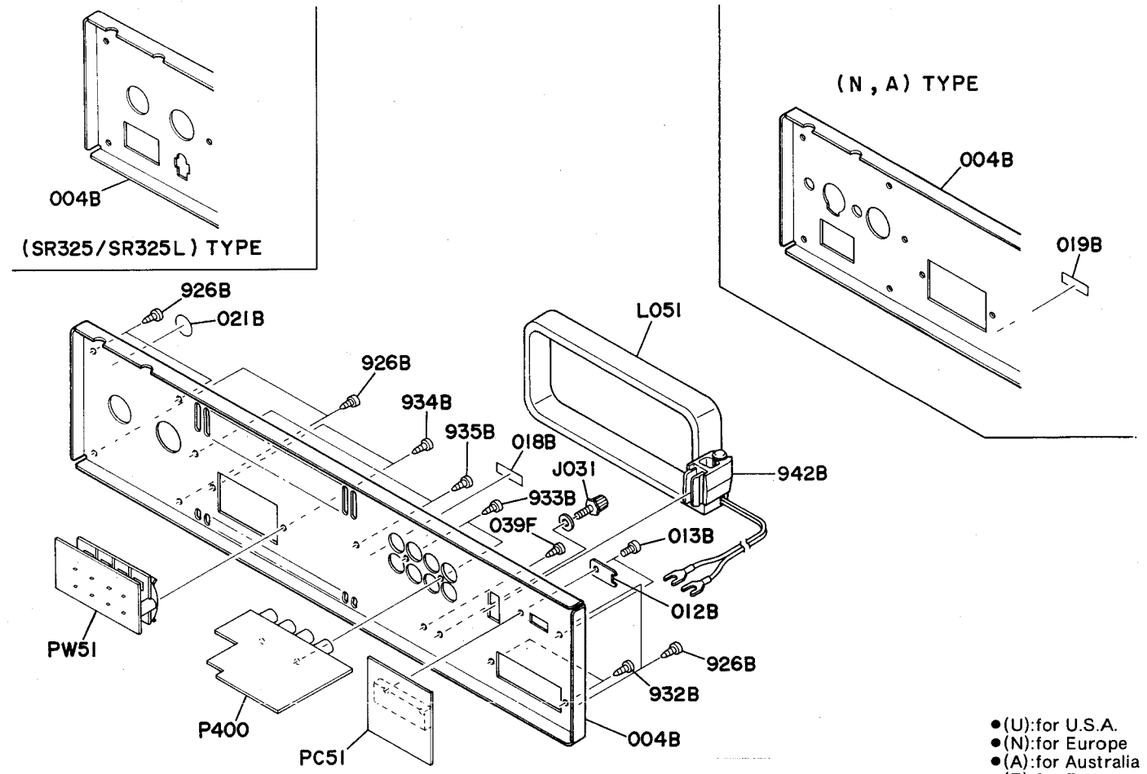
8.2 [C02-99] Top Cover



●(U):for U.S.A.
●(N):for Europe
●(A):for Australia
●(E):for Europe

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
						(SR320/SR320L)
014B	4				51260408Z0	B.T. Screw B4 x 8
014B		4	4	4	51260408U0	B.T. Screw B4 x 8
015B	2				51280308Z0	B.H. Tapped Screw B3 x 8
015B		2	2	2	51280308U0	B.H. Tapped Screw B3 x 8
022B		1	1	1	2932861110	Label
024B	2				117H861010	Label
903B	1	1	1	1	117H257010	Lid, Top Cover
938B	2	2	2	2	2991259110	Bushing
022B		1	1	1	2932861010	**(SR325/SR325L)** Label
024B	2				117H801020	Label
903B	1	1	1	1	117H257030	Lid, Top Cover
938B	2	2	2	2	2991259010	Bushing
945B	4	4	4	4	51260408U0	B.T. Screw B4 x 8
946B	2	2	2	2	51280308U0	B.H. Tapped Screw B3 x 8
						(ALL MODEL)
023B		1	1	1	2578861010	Label
904B	1	1	1	1	117H257020	Lid, Bottom Cover
914B	4	4	4	4	416H057010	Leg
927B	3	3	3	3	51280308B0	B.H. Tapped Screw B3 x 8
928B	5	5	5	5	51280306B0	B.H. Tapped Screw B3 x 6
929B	4	4	4	4	51280306B0	B.H. Tapped Screw B3 x 6

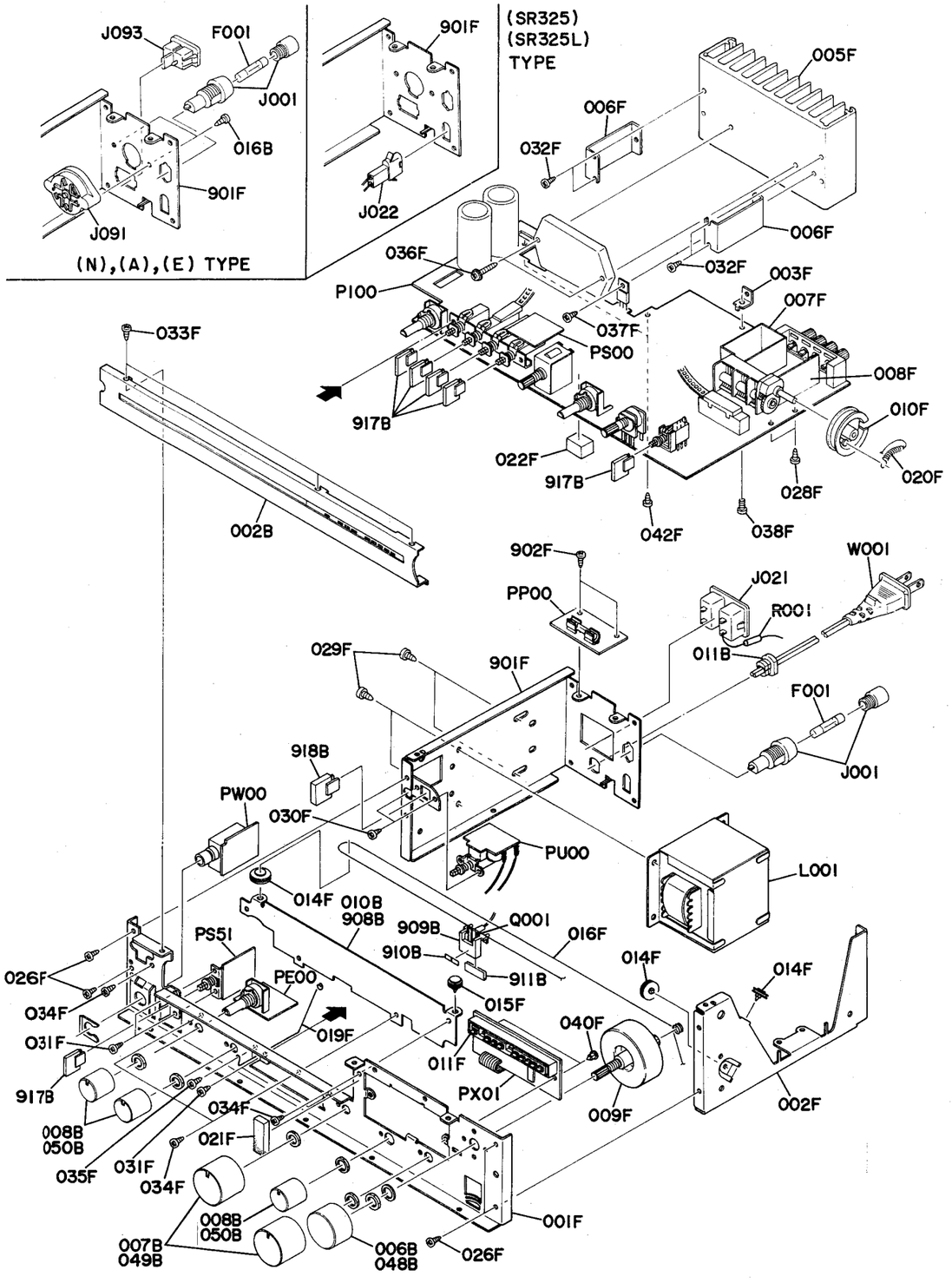
8.3 [C03-99] Rear Panel



●(U):for U.S.A.
●(N):for Europe
●(A):for Australia
●(E):for Europe

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
004B	1				117H160020	Bracket, Rear Panel (SR320)
004B		1	1		117H160030	Bracket, Rear Panel (SR320)
004B				1	117H160100	Bracket, Rear Panel (SR320)
004B		1			118H160010	Bracket, Rear Panel (SR320L)
004B	1				121H160010	Bracket, Rear Panel (SR325)
004B		1	1		121H160020	Bracket, Rear Panel (SR325)
004B				1	121H160030	Bracket, Rear Panel (SR325)
004B		1			122H160010	Bracket, Rear Panel (SR325L)
018B	1	1	1	1	2112265010	Indicator, Serial No.
019B		1	1	1	4581861010	Label, Made in Japan
021B	1				2457861040	Label, CSA
926B	6	6	6	6	51280308B0	B.H. Tapped Screw B3 x 8
932B	2	2	2	2	51280308B0	B.H. Tapped Screw B3 x 8
933B	2	2	2	2	51280308B0	B.H. Tapped Screw B3 x 8
934B	2	2	2	2	51280308B0	B.H. Tapped Screw B3 x 8
935B	2	2	2	2	51280308B0	B.H. Tapped Screw B3 x 8
942B	1	1	1	1	408H271010	Holder, Antenna
039F	1	1	1	1	51280308B0	B.H. Tapped Screw B3 x 8
J031	1	1	1	1	YL03010250	Terminal, GND
L051	1	1	1	1	LA00015020	Antenna Coil, Loop
012B				1	2137114010	Stopper, FM DE-Emphassis SW
013B				2	51100306A9	B.H.M. Screw B3 x 6

8.4 [P01-99] Chassis and General Parts

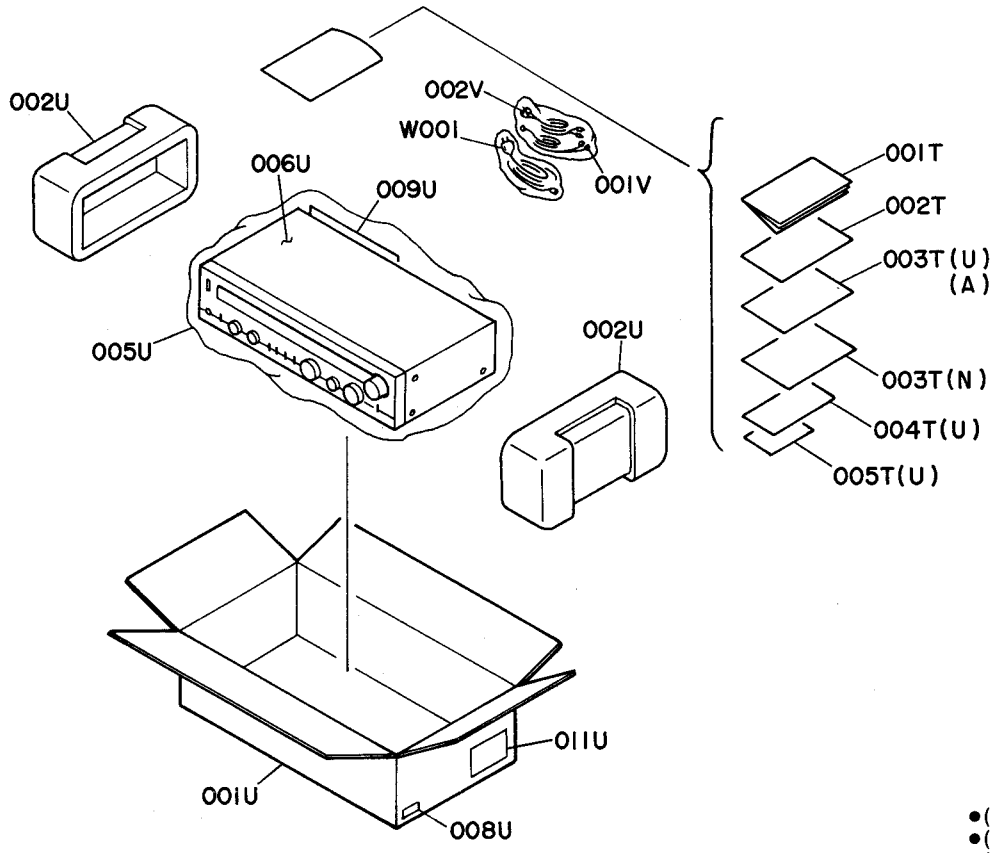


●(U):for U.S.A.
●(N):for Europe
●(A):for Australia
●(E):for Europe

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
002B	1				117H302030	Dial, (SR320)
002B		1	1		117H302010	Dial, (SR320)
002B	1	1	1	1	117H302010	Dial, (SR325)
002B		1			117H302020	Dial, (SR320L/SR325L)
006B	1				403H154200	Knob, Tuning (SR320)
006B		1	1	1	403H154020	Knob, Tuning (SR320/SR320L)
007B	2				208H154300	Knob, Function/Vol. (SR320)
007B		2	2	1	208H154010	Knob, Function/Vol. (SR320/SR320L)
008B	3				117H154030	Knob, (SR320)
008B		3	3	1	117H154020	Knob, (SR320/SR320L)
010B	1				117H051030	Guide, Dial (SR320)
010B		1	1	1	117H051010	Guide (SR320/SR320L)
011B	1				1455259090	Bushing (SR320/SR325)
016B		2	2	1	51280308B0	B.H. Tapped Screw B3 x 8
048B	1				403H154120	Knob, Tuning (SR325/SR325L)
048B		1	1	1	114H154110	Knob, Tuning (SR325/SR325L)
049B	2				208H154110	Knob, Function/Vol. (SR325/SR325L)
049B		2	2	2	226H154110	Knob, Function/Vol. (SR325/SR325L)
050B	3				117H154010	Knob, (SR325/SR325L)
050B		3	3	3	121H154010	Knob, (SR325/SR325L)
908B	1	1	1	1	117H051010	Guide, Dial (SR325/SR325L)
909B	1	1	1	1	417H103010	Pointer, L.E.D.
910B	1	1	1	1	117H303010	Mask
911B	1	1	1	1	417H118010	Spacker
917B	6	6	6	1	226H154140	Knob, Push
918B	1	1	1	1	226H154130	Knob, Power
001F	1	1	1	1	117H160010	Bracket, Front Chassis
002F	1	1	1	1	117H160040	Bracket, Right
003F	1	1	1	1	207T160080	Bracket
005F	1	1	1	1	117H267010	Heatsink
006F	2	2	2	2	117H160050	Bracket
007F	1	1	1	1	117H109010	Shield
008F	1	1	1	1	117H109020	Shield
009F	1	1	1	1	117H273010	Flywheel
010F	1	1	1	1	117H159010	Drum
011F	1	1	1	1	117H051020	Guide
014F	3	3	3	3	2259262500	Pulley
015F	1	1	1	1	2259262520	Pulley
016F	1	1	1	1	72040805A0	Spring, (130)
019F	1	1	1	1	117H115020	Spring
020F	1	1	1	1	2112115020	Spring
021F	1	1	1	1	117H056010	Buffer
022F	1	1	1	1	2255056020	Buffer
026F	4	4	4	4	51280308B0	B.H. Tapped Screw B3 x 8
028F	2	2	2	2	51280306B0	B.H. Tapped Screw B3 x 6
029F	4	4	4	4	51280410B0	B.H. Tapped Screw B4 x 10
030F	2	2	2	2	51100308A9	B.H.M. Screw B3 x 8
031F	4	4	4	4	51100308A9	B.H.M. Screw B3 x 8
032F	4	4	4	4	51280308B0	B.H. Tapped Screw B3 x 8
033F	3	3	3	3	51280308B0	B.H. Tapped Screw B3 x 8
034F	4	4	4	4	51280308B0	B.H. Tapped Screw B3 x 8
035F	1	1	1	1	51280308B0	B.H. Tapped Screw B3 x 8
036F	2	2	2	2	51260315B0	B.T. Screw B3 x 15

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
037F	1	1	1	1	51260308B0	B.T. Screw B3 x 8
038F	1	1	1	1	51460306A9	L. Washer Screw L3 x 6
040F	2	2	2	2	2276005050	Clamper
042F	2	2	2	2	51260308B0	B.T. Screw B3 x 8
901F	1				117H160070	Bracket, Transformer (SR320/SR325)
901F		1	1		117H160080	Bracket, Transformer
901F				1	117H160110	Bracket, Transformer
902F		2	2	2	51280308B0	B.H. Tapped Screw B3 x 8
⚠F001	1				FS10250500	Fuse, 2.5A 250V (SR320/SR325)
⚠F001		1	1	1	FS10080800	Fuse, 800mA 250V
⚠J001	1				YJ08000300	Jack, Fuse Holder (SR320/SR325)
⚠J001		1	1	1	YJ08000290	Jack, Fuse Holder
⚠J021	1				YJ04001070	Jack, AC Outlet (SR320/SR325)
J022		1	1	1	YB00190020	Connective Cord, (2P) (SR325/SR325L)
⚠J091		1	1		BY05030040	Voltage Selector
⚠J091				1	BY05080040	Voltage Selector (SR320/325)
⚠J093		1	1	1	YP04000580	Plag, AC Input
⚠L001	1				TS16636010	Power Transformer (SR320/SR325)
⚠L001		1	1		TS16636020	Power Transformer (SR320/SR320L)
⚠L001		1	1		TS16636040	Power Transformer (SR325L)
⚠L001				1	TS16636050	Power Transformer (SR320)
⚠L001				1	TS16636060	Power Transformer (SR325)
Q001	1	1	1	1	HI10033020	L.E.D., Pointer
R001	1				RC10225920	Resistor 2.2M ½W
⚠W001	1				YC01800260	A.C. Power Cord

8.5 [H01-99] Packing Materials



- (U):for U.S.A.
- (N):for Europe
- (A):for Australia
- (E):for Europe

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
001T	1				117H851210	Instructions
001T	1				121T851210	Instructions (SR325)
001T		1	1	1	117H851310	Instructions
001T		1	1	1	121T851310	Instructions (SR325/SR325L)
002T	1				117H851220	Instructions, Spec
002T	1				121T851220	Instructions, Spec (SR325)
002T		1	1	1	117H851320	Instructions, Spec
002T		1	1	1	121T851320	Instructions, Spec (SR325/SR325L)
003T	1				2818854020	Guarantee Card (SR320)
003T		1		1	117H856010	Circuit Diagram (SR320/SR325)
003T		1			118H856010	Circuit Diagram (SR320L)
003T			1		9631000090	Guarantee Card (SR320/SR325)
003T	1				103H854010	Guarantee Card (SR325)
004T	1				2225813010	Envelope (SR320/SR325)
005T	1				9560000100	Hang Tag (SR325)
901T	1				2818854040	Guarantee Card Canada
902T	1				9650000050	S. Station Card Canada

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
001U	1				117H801010	Packing Case (SR320)
001U		1	1	1	117H801020	Packing Case (SR320)
001U		1			118H801010	Packing Case (SR320L)
001U	1				121H801010	Packing Case (SR325)
001U		1	1	1	121H801020	Packing Case (SR325)
001U		1			122H801010	Packing Case (SR325L)
002U	2	2	2	2	117H809010	Cushion
005U	1	1	1	1	9090909030	Polyethyelene Sheet
006U	1	1	1	1	2918107360	Sheet
008U	2				9526019010	Serial No. Card (SR320/SR325)
008U		4			9526019060	Serial No. Card (SR320L/SR325L)
008U		4	4	4	9526019030	Serial No. Card (SR320/SR325)
009U	1				2918107390	Sheet
011U	2				9510901020	Label
001V	1	1	1	1	ZA02000070	EXT. Antenna
W001		1		1	ZC01805010	A.C. Power Cord
W001			1		ZC02006020	A.C. Power Cord

8.6 ELECTRICAL PARTS LIST

- (U):for U.S.A.
- (N):for Europe
- (A):for Australia
- (E):for Europe

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
						(SR320/SR325)
						P100-MAIN CIRCUIT BOARD
P100	1	1	1	1	YK117H10A0	P.W. Board, Main
	1				ZZ117H10A0	P.W. Board Assembly
		1	1	1	ZZ117H80A0	P.W. Board Assembly
						(SR320L/SR325L)
P100		1			YK117H10A0	P.W. Board, Main
		1			ZZ118H80A0	P.W. Board Assembly
						P100-CAPACITORS
CA01	1	1	1	1	DD15150370	Ceramic 15pF ±5%
CA03	1	1	1	1	DK18223310	Ceramic 0.022μF +80%–20%
CA04	1	1	1	1	DK18473320	Ceramic 0.047μF +80%–20%
CA05	1	1	1	1	DK18153310	Ceramic 0.015μF +80%–20%
CA06	1	1	1	1	DK18473320	Ceramic 0.047μF +80%–20%
CA07	1	1	1	1	EA10602530	Elect 10μF 25V
CA08	1	1	1	1	DK18103310	Ceramic 0.01μF +80%–20%
CA09	1	1	1	1	EA10602530	Elect 10μF 25V
CA10	1	1	1	1	DF55361090	Film 360pF ±5%
CA11	1	1	1	1	DD15150370	Ceramic 15pF ±5%
CA15	1	1	1	1	DD15470370	Ceramic 47pF ±5%
CK01	1	1	1	1	EA47503530	Elect 4.7μF 35V
CK03	1	1	1	1	EA33601630	Elect 33μF 16V
CK04	1	1	1	1	EA33505030	Elect 3.3μF 50V
C101	1	1	1		DD15120370	Ceramic 12pF ±5%
C102	1	1	1		DD16102370	Ceramic 1000pF ±10%
C103	1	1	1		DK18103310	Ceramic 0.01μF +80%–20%
C104	1	1	1		DD15150370	Ceramic 15pF ±5%
C105	1	1	1		DD10050370	Ceramic 5pF ±0.25pF
C106	1	1	1		DD11080370	Ceramic 8pF ±0.5pF
C107	1	1	1		DK18103310	Ceramic 0.01μF +80%–20%
C108	1	1	1		DK18223310	Ceramic 0.022μF +80%–20%
C109	1	1	1		DD15150340	Ceramic 15pF ±5%
C110	1	1	1		DD11100300	Ceramic 10pF ±0.5pF
C111	1	1	1	1	DD15330300	Ceramic 33pF ±5%
C112	1	1	1	1	DD11100300	Ceramic 10pF ±0.5pF
C113	1	1	1	1	DD10020300	Ceramic 2pF ±0.25pF
C114	1	1	1	1	DD15301360	Ceramic 300pF ±5%
C115	1	1	1	1	DK18223310	Ceramic 0.022μF +80%–20%
C117	1	1	1	1	CT11000150	Trimming 10pF
C118	1	1	1	1	CA32400130	Variable, CR52J (SR320/SR325)
C118		1			CA32200090	Variable, CR52J (SR320L/SR325L)
C201	1	1	1	1	DK18223310	Ceramic 0.022μF +80%–20%
C202	1	1	1	1	DK18223310	Ceramic 0.022μF +80%–20%
C203	1	1	1	1	DK18473320	Ceramic 0.047μF +80%–20%
C204	1	1	1	1	DK18473320	Ceramic 0.047μF +80%–20%
C205	1	1	1	1	EA10505030	Elect 1μF 50V
C206	1	1	1	1	EA33505030	Elect 3.3μF 50V
C207	1	1	1	1	EA33505030	Elect 3.3μF 50V
C208	1	1	1	1	DK18103310	Ceramic 0.01μF +80%–20%
C209	1	1	1	1	DK18103310	Ceramic 0.01μF +80%–20%
C210	1	1	1	1	DK18103310	Ceramic 0.01μF +80%–20%

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
C211	1	1	1	1	EA10505030	Elect 1μF 50V
C212	1	1	1	1	DF17393300	Film 0.039μF ±20%
C213	1	1	1	1	DK18473320	Ceramic 0.047μF +80%–20%
C214	1	1	1	1	EA10405030	Elect 0.1μF 50V
C215	1	1	1	1	DK18473320	Ceramic 0.047μF +80%–20%
C216	1	1	1	1	EA47601630	Elect 47μF 16V
C217	1	1	1	1	DK18473320	Ceramic 0.047μF +80%–20%
C218	1	1	1	1	DK18473320	Ceramic 0.047μF +80%–20%
C219	1	1	1	1	DK18473320	Ceramic 0.047μF +80%–20%
C220	1	1	1	1	DD15470370	Ceramic 47pF ±5%
C221	1	1	1	1	EA33405030	Elect 0.33μF 50V
C222	1	1	1	1	EA10602530	Elect 10μF 25V
C223	1	1	1	1	EA33505030	Elect 3.3μF 50V
C225	1	1	1	1	EA22505030	Elect 2.2μF 50V
C301	1	1	1	1	DD15470370	Ceramic 47pF ±5%
C302	1	1	1	1	DD15470370	Ceramic 47pF ±5%
C303	1	1	1	1	EA47405030	Elect 0.47μF 50V
C304	1	1	1	1	EA47405030	Elect 0.47μF 50V
C305	1	1	1	1	DF15222300	Film 2200pF ±5%
C306	1	1	1	1	DF15222300	Film 2200pF ±5%
C307	1	1	1	1	DF15102300	Film 1000pF ±5%
C308	1	1	1	1	DF15102300	Film 1000pF ±5%
C311	1	1	1	1	EA47503530	Elect 4.7μF 35V
C312	1	1	1	1	EA47503530	Elect 4.7μF 35V
C313	1	1	1	1	EA22701630	Elect 220μF 16V
C314	1	1	1	1	EA47503530	Elect 4.7μF 35V
C315	1	1	1	1	DF55471090	Film 470pF ±5%
C316	1	1	1	1	EA33505030	Elect 3.3μF 50V
C317	1	1	1	1	EQ22405030	Elect 0.22μF 50V
C318	1	1	1	1	EA10505030	Elect 1μF 50V
C319	1	1	1	1	DK15473310	Ceramic 0.047μF ±5%
C320	1	1	1	1	DK16471300	Ceramic 470pF ±10%
C323	1				DF15822300	Film 8200pF ±5% (SR320/SR325)
C323		1	1		DF15472300	Film 4700pF ±5% (SR320/SR325)
C323		1			DF15472300	Film 4700pF ±5% (SR320L/SR325L)
C324	1				DF15822300	Film 8200pF ±5% (SR320/SR325)
C324		1	1		DF15472300	Film 4700pF ±5% (SR320/SR325)
C324		1			DF15472300	Film 4700pF ±5% (SR320L/SR325L)
						(SR320L/SR325L)
CA02		1			DD15270370	Ceramic 270pF ±5%
CA12		1			DF55151090	Film 150pF ±5%
CA13		1			DD11100370	Ceramic 10pF ±0.5pF
CA14		1			DD15470370	Ceramic 47pF ±5%
CA16		1			CT21600020	Trimming 16pF
CA17		1			CT21600020	Trimming 16pF
C701	1	1	1	1	DD15561370	Ceramic 560pF ±5%
C702	1	1	1	1	DD15561370	Ceramic 560pF ±5%
C703	1	1	1	1	DF15473300	Film 0.047μF ±5%
C704	1	1	1	1	DF15473300	Film 0.047μF ±5%
C705	1	1	1	1	EA22505030	Elect 2.2μF 50V
C706	1	1	1	1	EA22505030	Elect 2.2μF 50V
C707	1	1	1	1	DD15221370	Ceramic 220pF ±5%
C708	1	1	1	1	DD15221370	Ceramic 220pF ±5%
C709	1	1	1	1	DD15331370	Ceramic 330pF ±5%
C710	1	1	1	1	DD15331370	Ceramic 330pF ±5%

- (U):for U.S.A.
- (N):for Europe
- (A):for Australia
- (E):for Europe

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
C711	1	1	1	1	DD11100370	Ceramic 10pF ±0.5pF
C712	1	1	1	1	DD11100370	Ceramic 10pF ±0.5pF
C713	1	1	1	1	EA47601030	Elect 47μF 10V
C714	1	1	1	1	EA47601030	Elect 47μF 10V
C717	1	1	1	1	DF15104550	Film 0.1μF ±5%
C718	1	1	1	1	DF15104550	Film 0.1μF ±5%
C719	1	1	1	1	EA10705030	Elect 100μF 50V
C720	1	1	1	1	EA10705030	Elect 100μF 50V
C721	1	1	1	1	EQ10602530	Elect 10μF 25V
C722	1	1	1	1	EQ10602530	Elect 10μF 25V
C723	1	1	1	1	EA10705030	Elect 100μF 50V
C724	1	1	1	1	EA10705030	Elect 100μF 50V
C725	1	1	1	1	DF15273300	Ceramic 0.027μF ±5%
C726	1	1	1	1	DF15273300	Ceramic 0.027μF ±5%
C733	1	1	1	1	DD15680370	Ceramic 68pF ±5%
C734	1	1	1	1	DD15680370	Ceramic 68pF ±5%
⚠C801	1	1	1	1	EB68804560	Elect 6800pF 45V
⚠C802	1	1	1	1	EB68804560	Elect 6800pF 45V
C803	1	1	1	1	EA47701630	Elect 470μF 16V
C804	1	1	1	1	EA47603530	Elect 47μF 35V
C805	1	1	1	1	EA10701630	Elect 100μF 16V
C806	1	1	1	1	EA10602530	Elect 10μF 25V
⚠C807	1	1	1	1	DK18103560	Ceramic 0.01μF +80%–20%
C808	1	1	1	1	EA22705030	Elect 220μF 50V
CE05	1	1	1	1	EA10602530	Elect 10μF 25V
CE06	1	1	1	1	EA10602530	Elect 10μF 25V
CE07	1	1	1	1	DF15472300	Film 4700pF ±5%
CE08	1	1	1	1	DF15472300	Film 4700pF ±5%
CE09	1	1	1	1	DF15273300	Film 0.027μF ±5%
CE10	1	1	1	1	DF15273300	Film 0.027μF ±5%
						P100-RESISTORS (All Resistors are ±5% & ¼W)
RA01	1	1	1	1	GD05821140	820Ω
RA02	1	1	1	1	GD05333140	33KΩ
RA03	1	1	1	1	GD05822140	8.2KΩ
RA04	1	1	1	1	GD05222140	2.2KΩ
RA05	1	1	1	1	GD05274140	270KΩ
RA06	1	1	1	1	GD05220140	22Ω
RA07	1	1	1	1	GD05102140	1KΩ
RA08	1	1	1	1	GD05223140	22KΩ
RA09	1	1	1	1	GD05222140	2.2KΩ
RA10	1	1	1	1	GD05102140	1KΩ
RA11	1	1	1	1	GD05682140	6.8KΩ
RK01	1	1	1	1	GD05393140	39KΩ
RK02	1	1	1	1	GD05104140	100KΩ
RK03	1	1	1	1	GD05104140	100KΩ
RK06	1	1	1	1	GD05223140	22KΩ
RK07	1	1	1	1	GD05564140	560KΩ
RK08	1	1	1	1	GD05124140	120KΩ
RK09	1	1	1	1	GD05104140	100KΩ
RK10	1	1	1	1	GD05103140	10KΩ
RK11	1	1	1	1	GD05102140	1KΩ
RK12	1	1	1	1	GD05153140	15KΩ
R101	1	1	1	1	GD05104140	100KΩ
R102	1	1	1	1	GD05101140	100Ω
R103	1	1	1	1	GD05101140	100Ω
R104	1	1	1	1	GD05103140	10KΩ
R105	1	1	1	1	GD05222140	2.2KΩ
R106	1	1	1	1	GD05332140	3.3KΩ
R107	1	1	1	1	GD05223140	22KΩ
R108	1	1	1	1	GD05102140	1KΩ
R110	1	1	1	1	GG05221140	220Ω
R111	1	1	1	1	GD05101140	100Ω

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
R112	1	1	1	1	GD05103140	10KΩ
R201	1	1	1	1	GD05470140	47Ω
R202	1	1	1	1	GD05331140	330Ω
R203	1	1	1	1	GD05332140	3.3KΩ
R204	1	1	1	1	GD05681140	680Ω
R205	1	1	1	1	GD05331140	330Ω
R206	1	1	1	1	GD05221140	220Ω
R207	1	1	1	1	GD05563140	56KΩ
R208	1	1	1	1	GD05154140	150KΩ
R209	1	1	1	1	GD05331140	330Ω
R210	1	1	1	1	GD05333140	33KΩ
R211	1	1	1	1	GD05333140	33KΩ
R212	1	1	1	1	GD05102140	1KΩ
R213	1	1	1	1	GD05103140	10KΩ
R214	1	1	1	1	GD05273140	27KΩ
R215	1	1	1	1	GD05333140	33KΩ
R216	1	1	1	1	GD05473140	47KΩ
R217	1	1	1	1	GD05332140	3.3KΩ
R218	1	1	1	1	GD05222140	2.2KΩ
R219	1	1	1	1	GD05473140	47KΩ
R220	1	1	1	1	GD05104140	100KΩ
R221	1	1	1	1	GD05334140	330KΩ
R222	1	1	1	1	GD05104140	100KΩ
R223	1	1	1	1	GD05103140	10KΩ
R224	1	1	1	1	GD05333140	33KΩ
R225	1	1	1	1	GD05563140	56KΩ
R226	1	1	1	1	GD05473140	47KΩ
R227	1	1	1	1	GG05560140	56Ω
R228	1	1	1	1	GD05222140	2.2KΩ
R229	1	1	1	1	GD05123140	12KΩ
R231	1	1	1	1	GD05223140	22KΩ
R232	1	1	1	1	GD05331140	330Ω
R301	1	1	1	1	GD05393140	39KΩ
R302	1	1	1	1	GD05393140	39KΩ
R303	1	1	1	1	GD05473140	47KΩ
R304	1	1	1	1	GD05473140	47KΩ
R305	1	1	1	1	GD05103140	10KΩ
R306	1	1	1	1	GD05103140	10KΩ
R307	1	1	1	1	GD05103140	10KΩ
R308	1	1	1	1	GD05103140	10KΩ
R309	1	1	1	1	GD05154140	150KΩ
R310	1	1	1	1	GD05154140	150KΩ
R311	1	1	1	1	GD05102140	1KΩ
R312	1	1	1	1	GD05102140	1KΩ
R313	1	1	1	1	GD05471140	470Ω
R314	1	1	1	1	GD05471140	470Ω
R315	1	1	1	1	GD05104140	100KΩ
R316	1	1	1	1	GD05104140	100KΩ
R317	1	1	1	1	GG05560140	56Ω
R318	1	1	1	1	GD05103140	10KΩ
R319	1	1	1	1	GD05153140	15KΩ
R320	1	1	1	1	RA05020800	5KΩ(B), Trimming
R321	1	1	1	1	GD05102140	1KΩ
R322	1	1	1	1	GD05474140	470KΩ
R323	1	1	1	1	GD05102140	1KΩ
R324	1				RA01030800	10KΩ(B), Trimming
R324		1	1	1	RA05020800	5KΩ(B), Trimming
R325	1	1	1	1	GD05473140	47KΩ
R326	1	1	1	1	GD05473140	47KΩ
R701	1	1	1	1	GD05222140	2.2KΩ

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- (E):for Europe

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
R702	1	1	1	1	GD05222140	2.2KΩ
R703	1	1	1	1	GD05222140	2.2KΩ
R704	1	1	1	1	GD05222140	2.2KΩ
R705	1	1	1	1	GD05123140	12KΩ
R706	1	1	1	1	GD05123140	12KΩ
R707	1	1	1	1	GD05103140	10KΩ
R708	1	1	1	1	GD05103140	10KΩ
R709	1	1	1	1	GD05102140	1KΩ
R710	1	1	1	1	GD05102140	1KΩ
R711	1	1	1	1	GD05183140	18KΩ
R712	1	1	1	1	GD05183140	18KΩ
R713	1	1	1	1	GD05104140	100KΩ
R714	1	1	1	1	GD05104140	100KΩ
R715	1	1	1	1	GD05102140	1KΩ
R716	1	1	1	1	GD05102140	1KΩ
R717	1	1	1	1	GD05104140	100KΩ
R718	1	1	1	1	GD05104140	100KΩ
R719	1	1	1	1	GD05102140	1KΩ
R720	1	1	1	1	GD05102140	1KΩ
R721	1	1	1	1	GA05100010	10Ω 1W
R722	1	1	1	1	GA05100010	10Ω 1W
R723	1	1	1	1	GD05561140	560Ω
R724	1	1	1	1	GD05561140	560Ω
R725	1	1	1	1	RC10022120	2.2Ω ½W
R726	1	1	1	1	RC10022120	2.2Ω ½W
⚠R727	1	1	1	1	GG05181140	180Ω
⚠R728	1	1	1	1	GG05561140	560Ω
R729	1	1	1	1	RK02040190	200KΩ(W), Variable
R730	1	1	1	1	RM01040600	100KΩ(B), Variable
R731	1	1	1	1	GD05105140	1MΩ
R732	1	1	1	1	GD05105140	1MΩ
R801	1	1	1	1	GD05152140	1.5KΩ
R802	1	1	1	1	GD05223140	22KΩ
⚠R803	1	1	1	1	GG05122120	1.2KΩ ½W
R804	1	1	1	1	GD05221140	220Ω
⚠R805	1	1	1	1	RF05220120	22Ω ½W
R806	1	1	1	1	GD05222140	2.2KΩ
R807	1	1	1	1	GD05561140	560Ω
R808	1	1	1	1	GG05221140	220Ω
RE07	1	1	1	1	GD05681140	680Ω
RE08	1	1	1	1	GD05681140	680Ω
RE09	1	1	1	1	GD05104140	100KΩ
RE10	1	1	1	1	GD05104140	100KΩ
RE11	1	1	1	1	GD05272140	2.7KΩ
RE12	1	1	1	1	GD05272140	2.7KΩ
RE13	1	1	1	1	GD05153140	15KΩ
RE14	1	1	1	1	GD05153140	15KΩ
RE16	1	1	1	1	RM01040640	100KΩ(C), Variable
						P100-SEMICONDUCTORS
QA01	1	1	1	1	HT308291C0	Transistor 2SC829(C)
QA02	1	1	1	1	HT308291C0	Transistor 2SC829(C)
QA03	1	1	1	1	HD10003030	Diode 1S188FM1
QK01	1	1	1	1	HC10031020	IC AN6135
QK02	1	1	1	1	HT309452B0	Transistor 2SC945(P or Q)
QK03	1	1	1	1	HT309452B0	Transistor 2SC945(P or Q)
QK04	1	1	1	1	HD20001210	Diode 1S2473
QK05	1	1	1	1	HD20001210	Diode 1S2473
QK06	1	1	1	1	HD20001210	Diode 1S2473
QK07	1	1	1	1	HD20001210	Diode 1S2473
QK08	1	1	1	1	HD20001210	Diode 1S2473
QK09	1	1	1	1	HD20001210	Diode 1S2473
QK10	1	1	1	1	HD20001210	Diode 1S2473
QK11	1	1	1	1	HD20001210	Diode 1S2473
QK12	1	1	1	1	HD20001210	Diode 1S2473

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
Q101	1	1	1	1	HF200551D0	F.E.T. 2SK55(D)
Q102	1	1	1	1	HT310471C0	Transistor 2SC1047(C)
Q103	1	1	1	1	HT308291D0	Transistor 2SC829(D)
Q201	1	1	1	1	HT310471C0	Transistor 2SC1047(C)
Q202	1	1	1	1	HD20001210	Diode 1S2473
Q203	1	1	1	1	HD20001210	Diode 1S2473
Q204	1	1	1	1	HC10025010	IC HA11211
Q205	1	1	1	1	HD10003030	Diode 1S188FM1
Q206	1	1	1	1	HD10003030	Diode 1S188FM1
Q207	1	1	1	1	HD20001210	Diode 1S2473
Q301	1	1	1	1	HC10024060	IC μPC1161C
Q302	1	1	1	1	HT309452B0	Transistor 2SC945(P or Q)
Q303	1	1	1	1	HT309452B0	Transistor 2SC945(P or Q)
⚠Q701	1	1	1	1	HC10090030	IC STK4833
⚠Q801	1	1	1	1	HD20009290	Diode S2V-20
⚠Q802	1	1	1	1	HD20009290	Diode S2V-20
⚠Q803	1	1	1	1	HD20009290	Diode S2V-20
⚠Q804	1	1	1	1	HD20009290	Diode S2V-20
⚠Q805	1	1	1	1	HT412652A0	Transistor 2SD1265(Q or P)
Q806	1	1	1	1	HD30027090	Zener WZ-140
Q807	1	1	1	1	HD30027090	Zener WZ-140
						P100-MISCELLANEOUS
FA01	1	1	1	1	FF10045200	Ceramic Filter 450KHz
F201	1				FF11070530	Ceramic Filter 10.7MD-1
F201		1	1	1	FF11070130	Ceramic Filter 10.7MS3GY-Z
F202	1				FF11070570	Ceramic Filter 10.7MS3G
F202		1	1	1	FF11070130	Ceramic Filter 10.7MS3GY-Z
J101	1	1	1	1	YT01040230	Terminal, Antenna
LA01	1	1	1	1	LA10295010	Antenna Coil, AM
LA03	1	1	1	1	LO10013280	OSC Coil, AM
LA05	1	1	1	1	LI10013230	I.F.T. Coil, AM
L101	1	1	1	1	LA12026170	Antenna Coil, FM
L102	1	1	1	1	LA12026290	Antenna Coil, FM
L103	1	1	1	1	LO12036010	OSC Coil, FM
L104	1	1	1	1	LC17510010	Choke Coil, FM
L105	1	1	1	1	LI10016010	I.F.T. Coil, FM
L201	1	1	1	1	LI10013240	I.F.T. Coil, AM Detector
L202	1	1	1	1	LI10308020	I.F.T. Coil, FM Detector
L203	1	1	1	1	LI10308030	I.F.T. Coil, FM Detector
L204		1	1	1	LS10440030	M.P.X. Coil, FM
L701	1	1	1	1	LL23905120	Coil, Choke
L702	1	1	1	1	LL23905120	Coil, Choke
S101	1	1	1	1	SR04040260	Rotary Switch, Selector
S701	1	1	1	1	SP02040170	Push Switch (SR320/SR325)
S703	1	1	1	1	SP02010680	Push Switch, Loudness
W701	1	1	1	1	YU03200240	Jumper Lead, (3P)
W702	1	1	1		YU02060240	Jumper Lead, (2P)
						(SR320L/SR325L)
LA02		1			LA10295020	Antenna Coil, LW
LA04		1			LO10013290	OSC Coil, LW
L204		1			LS10440030	M.P.X. Coil, FM
SA01		1			SS06020500	Slide Switch, MW-LW
S701		1			SP04040260	Push Switch
S702		1			SB12640010	Switch Band, FLX

- (U):for U.S.A.
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- (E):for Europe

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
						P400-PHONO AMP. CIRCUIT BOARD
P400	1	1	1	1	YK117H10B0	P.W. Board, Phono Amp
	1	1	1	1	ZZ117H10B0	P.W. Board Assembly
						P400-CAPACITORS
C401	1	1	1	1	DD15331370	Ceramic 330pF ±5%
C402	1	1	1	1	DD15331370	Ceramic 330pF ±5%
C403	1	1	1	1	EA47503530	Elect 4.7μF 35V
C404	1	1	1	1	EA47503530	Elect 4.7μF 35V
C405	1	1	1	1	EA47601030	Elect 47μF 10V
C406	1	1	1	1	EA47601030	Elect 47μF 10V
C407	1	1	1	1	DF15682300	Film 6800pF ±5%
C408	1	1	1	1	DF15682300	Film 6800pF ±5%
C409	1	1	1	1	DF15182300	Film 1800pF ±5%
C410	1	1	1	1	DF15182300	Film 1800pF ±5%
C411	1	1	1	1	DK16152300	Ceramic 1500pF ±10%
C412	1	1	1	1	DK16152300	Ceramic 1500pF ±10%
C413	1	1	1	1	EA47503530	Elect 4.7μF 35V
C414	1	1	1	1	EA47503530	Elect 4.7μF 35V
C415	1	1	1	1	EA10701630	Elect 100μF 16V
C416	1	1	1	1	EA10701630	Elect 100μF 16V
						P400-RESISTORS (All Resistors are ±5% & ¼W)
R401	1	1	1	1	GD05154140	150KΩ
R402	1	1	1	1	GD05154140	150KΩ
R403	1	1	1	1	GD05222140	2.2KΩ
R404	1	1	1	1	GD05222140	2.2KΩ
R405	1	1	1	1	GD05683140	68KΩ
R406	1	1	1	1	GD05683140	68KΩ
R407	1	1	1	1	GD05821140	820Ω
R408	1	1	1	1	GD05821140	820Ω
R409	1	1	1	1	GD05474140	470KΩ
R410	1	1	1	1	GD05474140	470KΩ
R411	1	1	1	1	GD05393140	39KΩ
R412	1	1	1	1	GD05393140	39KΩ
R413	1	1	1	1	GD05471140	470Ω
R414	1	1	1	1	GD05471140	470Ω
R415	1	1	1	1	GD05224140	220KΩ
R416	1	1	1	1	GD05224140	220KΩ
						P400-SEMICONDUCTORS
Q401	1	1	1	1	HC10013370	IC TL4558PB
						P400-MISCELLANEOUS
W401	1	1	1	1	YU07180260	Jumper Lead, (7P)
W402	1	1	1	1	YU05220260	Jumper Lead, (5P)
W403	1	1	1	1	YU05220260	Jumper Lead, (5P)
W401	1	1	1	1	YU02120260	Jumper Lead, (2P)
J401	1	1	1	1	YT02040470	Terminal, Tape IN/OUT
J402	1	1	1	1	YT02040470	Terminal, Phone AUX Input
						PE00-TONE VR. CIRCUIT BOARD
PE00	1	1	1	1	YK117H10I0	P.W. Board, Tone VR.
	1	1	1	1	ZZ117H10I0	P.W. Board Assembly

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
						PE00-CAPACITORS
CE01	1	1	1	1	DF15183300	Film 0.018μF ±5%
CE02	1	1	1	1	DF15183300	Film 0.018μF ±5%
CE03	1	1	1	1	EA10405030	Elect 0.1μF 50V
CE04	1	1	1	1	EA10405030	Elect 0.1μF 50V
						PE00-RESISTORS (All Resistors are ±5% & ¼W)
RE01	1	1	1	1	GD05153140	15KΩ
RE02	1	1	1	1	GD05153140	15KΩ
RE03	1	1	1	1	GD05272140	2.7KΩ
RE04	1	1	1	1	GD05272140	2.7KΩ
RE05	1	1	1	1	GD05561140	560Ω
RE06	1	1	1	1	GD05561140	560Ω
RE15	1	1	1	1	RM01040640	100KΩ(C), Variable
						PE00-MISCELLANEOUS
WE01	1	1	1	1	YU05070260	Jumper Lead, (5P)
						(SR325/SR325L) PP00-FUSE CIRCUIT BOARD
PP00		1	1	1	YK117H10H0	P.W. Board, Fuse
		1	1	1	ZZ121H80H0	P.W. Board Assembly
FP01		1	1	1	FS10050800	Fuse, T500mA 250V
JP05		1	1	1	YJ08000330	Jack, Fuse Holder
JP06		1	1	1	YJ08000330	Jack, Fuse Holder
						PS00-TAPE MONITOR SW. CIRCUIT BOARD
PS00	1	1	1	1	YK117H10D0	P.W. Board, Tape Monitor SW.
	1	1	1	1	ZZ117H10D0	P.W. Board Assembly
RS01	1	1	1	1	GD05102140	Resistor 1KΩ ±5% ¼W
RS02	1	1	1	1	GD05102140	Resistor 1KΩ ±5% ¼W
						PS51-SPEAKER SWITCH CIRCUIT BOARD
PS51	1	1	1	1	YK117H10J0	P.W. Board, Speaker Switch
	1	1	1	1	ZZ117H10J0	P.W. Board Assembly
SS51	1	1	1	1	SP02010920	Push Switch, Speaker
						PU00-POWER SWITCH CIRCUIT BOARD
PU00	1	1	1	1	YK117H10G0	P.W. Board, Power Switch
	1				ZZ117H10G0	P.W. Board Assembly
		1	1	1	ZZ117H80G0	P.W. Board Assembly
⚠G001	1				DK18103530	Ceramic Cap. 0.01μF
⚠G001		1	1	1	DK18103840	Ceramic Cap. 0.01μF
⚠S001	1				SP01010420	Push Switch, Power
⚠S001		1	1	1	SP01010390	Push Switch, Power

- (U):for U.S.A.
- (N):for Europe
- (A):for Australia
- (E):for Europe

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
						PW00-HEADPHONE CIRCUIT BOARD
PW00	1	1	1	1	YK117H10E0	P.W. Board, Headphone
	1	1	1	1	ZZ117H10E0	P.W. Board Assembly
PW01	1	1	1	1	GA05331010	Resistor 330Ω 5% 1W
PW02	1	1	1	1	GA05331010	Resistor 330Ω 5% 1W
JW01	1	1	1	1	YJ01001770	Jack, Headphone
						PW51-SPEAKER TERMINAL CIRCUIT BOARD
PW51	1	1	1	1	YK117H10F0	P.W. Board, Speaker Terminal
	1	1	1	1	ZZ117H10F0	P.W. Board Assembly
JW51	1	1	1	1	YT03080030	Terminal, (8P)
WW01	1	1	1	1	YU04300240	Jumper Lead, (4P)
						PX01-L.E.D. METER CIRCUIT BOARD
PX01	1	1	1	1	YK117H10C0	P.W. Board, L.E.D. Meter
	1	1	1	1	ZZ117H10C0	P.W. Board Assembly
						PX01-CAPACITOR
CX01	1	1	1	1	EA22505030	Elect 2.2μF 50V
						PX01-RESISTORS (All Resistors are ±5% & ¼W)
RX01	1	1	1	1	GD05151140	150Ω
RX02	1	1	1	1	GD05184140	180KΩ
RX03	1	1	1	1	GD05102140	1KΩ
RX04	1	1	1	1	GD05104140	100KΩ
RX05	1	1	1	1	GD05102140	1KΩ
RX06	1	1	1	1	GD05102140	1KΩ
RX07	1	1	1	1	GD05102140	1KΩ
RX08	1	1	1	1	GD05102140	1KΩ
RX09	1	1	1	1	GD05102140	1KΩ
RX10	1	1	1	1	GD05104140	100KΩ
RX11	1	1	1	1	GD05561140	560Ω
RX12	1	1	1	1	GD05102140	1KΩ
RX13	1	1	1	1	GD05102140	1KΩ
RX14	1	1	1	1	GD05223140	22KΩ

REF. DESIG.	Q'TY U	N	A	E	PART NO.	DESCRIPTION
						PX01-SEMICONDUCTORS
QX01	1	1	1	1	HC10003320	IC IR2E11
QX02	1	1	1	1	HI10030020	L.E.D. LN224RP, Signal
QX03	1	1	1	1	HI10030020	L.E.D. LN224RP, Signal
QX04	1	1	1	1	HI10030020	L.E.D. LN224RP, Signal
QX05	1	1	1	1	HI10030020	L.E.D. LN224RP, Signal
QX06	1	1	1	1	HI10030020	L.E.D. LN224RP, Signal
QX07	1	1	1	1	HI10031020	L.E.D. LN324GP, Tuning
QX08	1	1	1	1	HI10030020	L.E.D. LN224RP, Tuning
QX09	1	1	1	1	HI10030020	L.E.D. LN224RP, Tuning
QX10	1	1	1	1	HI10030020	L.E.D. LN224RP, Stereo
						PX01-MISCELLANEOUS
WX01	1	1	1	1	YU06160260	Jumper Lead, (6P)
						(SR320/SR325) PC51 DE-EMPHASIS SWITCH CIRCUIT BOARD
PC51				1	YF415H0010	P.W. Board, DE-Emphasis Switch
				1	ZZ117H0010	P.W. Board Assembly
						PC51-CAPACITORS
CC51				1	DF15472300	Film 4700pF ±5%
CC52				1	DF15472300	Film 4700pF ±5%
CC53				1	DF15362300	Film 3600pF ±5%
CC54				1	DF15362300	Film 3600pF ±5%
						PC51-SWITCH
SC51				1	SS02020380	Slide Switch DE-Emphasis

(W01-99)	Assembly and Wiring
(T01-99)	Adjustment
(X01-00)	Correction

NOTE ON SAFETY:

Symbol ⚠ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol ⚠ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

9. TECHNICAL SPECIFICATIONS

Model SR320/SR320L

AUDIO SECTION

POWER OUTPUT PER CHANNEL

4 OHMS DIN	**35W**
4 OHMS RMS	**32W**
8 OHMS DIN	**32W**
8 OHMS RMS	**30W**
TOTAL HARMONIC DISTORTION AT RMS 8 OHMS	**0.05%**
DAMPING FACTOR 8 OHMS	**50**

Frequency Response	
Phono (RIAA)	±2.0 dB
Aux (±1 dB)	16 Hz – 30 kHz
Signal-to-Noise Ratio	
Phono	80 dB
Aux	85 dB
Input Terminals	
Phono: Input Sensitivity/Impedance	2.8 mV/47 kohms
Aux: Input Sensitivity/Impedance	160 mV/25 kohms

FM TUNER SECTION

Frequency Range	87.5 – 108 MHz
Usable Sensitivity	
DIN Mono (S/N 26 dB, 300 ohms)	2.2 μV
DIN Stereo (S/N 46 dB, 300 ohms)	80 μV
Alternate Channel Selectivity, 98 MHz	60 dB
Signal-to-Noise Ratio, 98 MHz	
Unweighted: Mono	70 dB
Stereo	60 dB
Weighted: Mono	72.5 dB
Stereo	62 dB

MW TUNER SECTION

Frequency Range	525 – 1605 kHz
Usable Sensitivity (20 dB S/N 30% Mod., 1 MHz)	(LOOP) 600 μV
Selectivity	46 dB

LW TUNER SECTION

Frequency Range	150 – 350 kHz
Usable Sensitivity (20 dB S/N 30% 250 kHz)	(LOOP) 1000 μV

GENERAL

Power Requirements	
N version	220/240 V AC, 50/60 Hz
T version	220/240 V AC, 50/60 Hz
E version	110/120/220/240 V AC, 50/60 Hz
Power Consumption at Rated Output, Both Channels Operating	114W
Dimensions	
Panel Width	416 mm
Panel Height	100 mm
Depth	194 mm
Weight	
Unit alone	5.2 kg

Specifications and apperance are subject to change for modification without notice.

Model SR325/SR325L

AUDIO SECTION

POWER OUTPUT PER CHANNEL

DIN 4 OHMS	**30W**
RMS 4 OHMS	**28W**
DIN 8 OHMS	**28W**
RMS 8 OHMS	**26W**
TOTAL HARMONIC DISTORTION AT RMS 8 OHMS	**0.05%**
DAMPING FACTOR 8 OHMS	**30**

Frequency Response	
Phono: (RIAA)	±2.0 dB
Aux: (±2.0 dB)	20 Hz – 20 kHz
Signal-to-Noise Ratio	
Phono	70 dB
Aux	80 dB
Input Terminals	
Phono: Input Sensitivity/Impedance	2.8 mV/47 kohms
Aux: Input Sensitivity/Impedance	160 mV/25 kohms

FM TUNER SECTION

Frequency Range	87.4 – 108.2 MHz
Usable Sensitivity	
DIN Mono (S/N 26 dB, 75 ohms)	1.5 μV
DIN Stereo (S/N 46 dB, 75 ohms)	25 μV
Alternate Channel Selectivity, 98 MHz	60 dB
Signal-to-Noise Ratio, 98 MHz	
Unweighted: Mono	70 dB
Stereo	50 dB
Weighted: Mono	75 dB
Stereo	65 dB

MW TUNER SECTION

Frequency Range	525 – 1630 kHz
Usable Sensitivity (20 dB S/N 30% Mod., 1 MHz)	30 μV
Selectivity	30 dB

LW TUNER SECTION

Frequency Range	145 – 380 kHz
Usable Sensitivity (20 dB S/N 30% 250 kHz)	200 μV

GENERAL

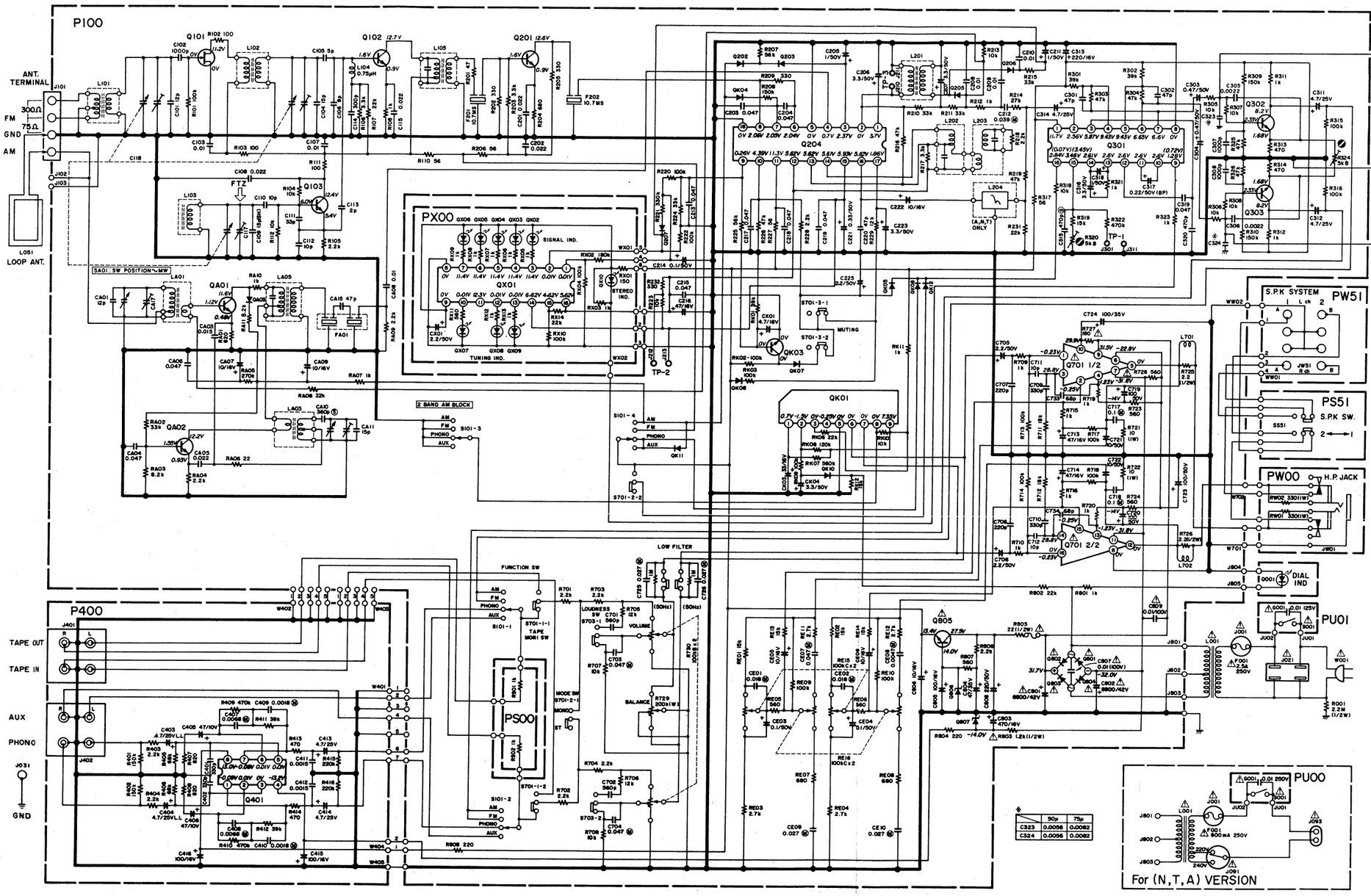
Power Requirements	
N version	220/240 V AC, 50/60 Hz
T version	220/240 V AC, 50/60 Hz
E version	110/120/220/240 V AC, 50/60 Hz
Power Consumption at Rated Output, Both Channels Operating	115W
Dimensions	
Panel Width	416 mm
Panel Height	100 mm
Depth	194 mm
Weight	
Unit alone	5.2 kg

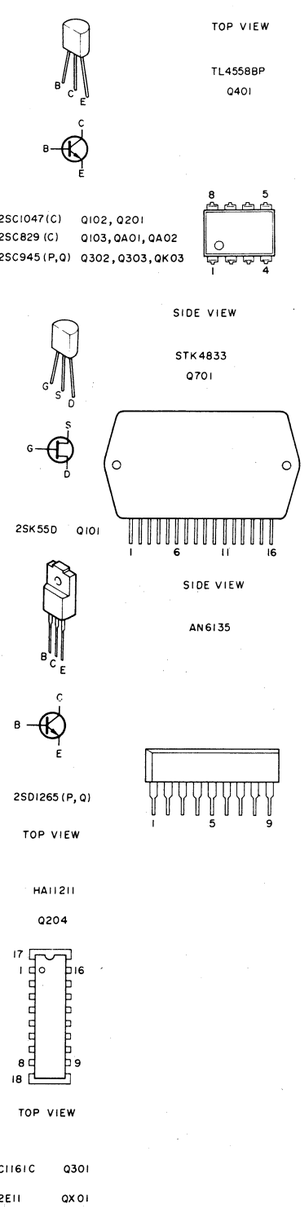
Specifications and apperance are subject to change for modification without notice.

10. SCHEMATIC DIAGRAM

Model SR320

Q001 HI10033020 LN05289	Q101 HF200551D0 2SK55D	Q102, Q201 HT31047IC0 2SC1047(C)	Q103, QA01, QA02 HT308291C0 2SC829(C)	Q202, Q203, Q207 QK04～QK12 HD20016030 DS448	Q204 HCI0025010 HAI1211	Q205, Q206, QA03 HDI0003032 ISI88	Q301 HCI0024060 μPC1161C	Q302, Q303 QK03 HT309452B0 2SC945QorR	Q401 HCI0013370 TL4558BP	Q701 HCI0090030 STK4833	Q801～Q804 HD20009290 S2V-20	Q805 HT412652A0 2SDI265(P,Q)	Q806, Q807 HD30027090 WZ-140	QK01 HCI0031020 AN6135	QX01 HCI0003320 IR2EII	QX02～QX06 QX08～QX10 HI10030020 LN224RP	QX07 HI10031020 LN324GP		





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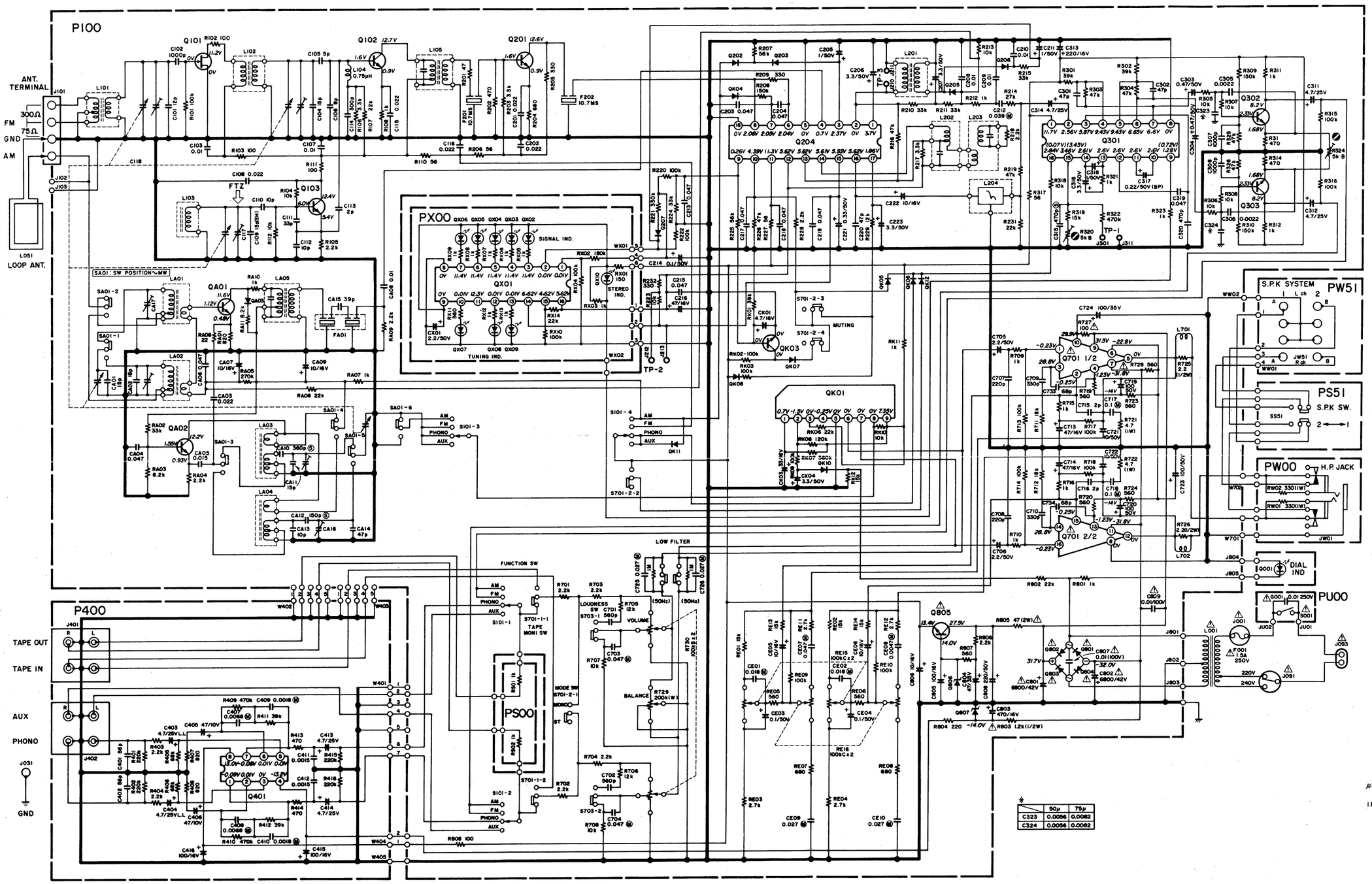
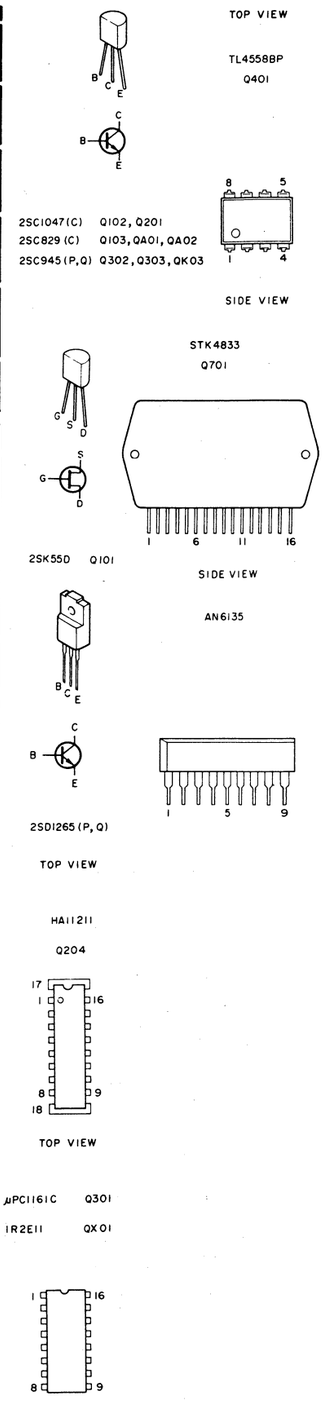
Components and wiring are subject to change for modification without notice.

Model SR320L

Q001 HI10033020 LN05289	Q101 HF200551D0 2SK55D	Q102,Q201 HT310471C0 2SC1047(C)	Q103,QA01,QA02 HT308291C0 2SC829(C)	Q202,Q203,Q207 QK04～QK12 HD20016030 DS448	Q204 HC10025010 HA11211	Q205,Q206,QA03 HD10003032 IS188	Q301 HC10024060 μPC1161C	Q302,Q303 QK03 HT309452B0 2SC945QorR	Q401 HC10013370 TL4558BP	Q701 HC10090030 STK4833	Q801～Q804 HD20009290 S2V-20	Q805 HT4126S2A0 2SD1265(P,Q)	Q806,Q807 HD30027090 WZ-140	QK01 HC10031020 AN6135	QX01 HC10003320 IR2E11	QX02～QX06 QX08～QX10 HI10030020 LN224RP	QX07 HI10031020 LN324GP





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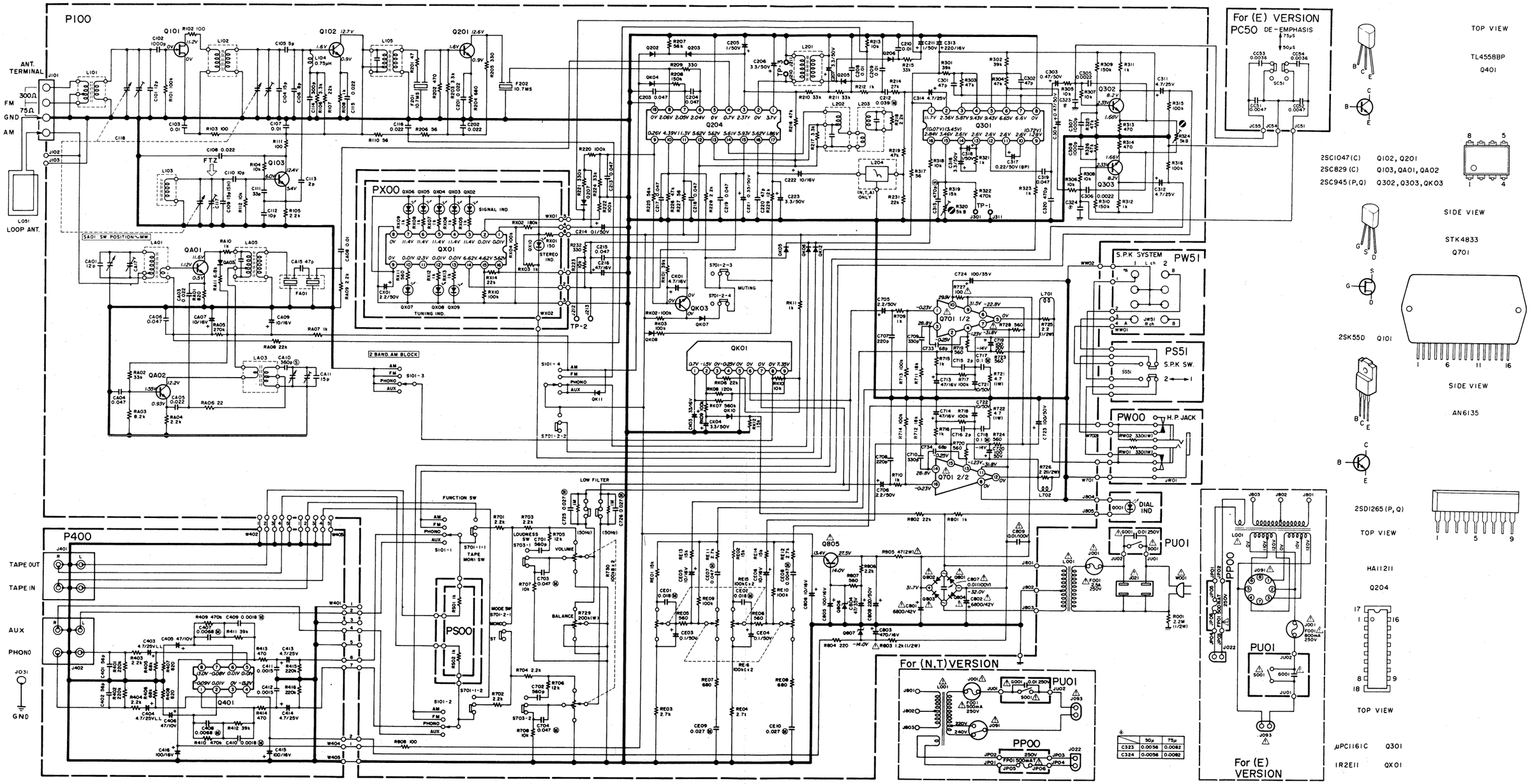
Components and wiring are subject to change for modification without notice.

Model SR325

Q001	Q101	Q102, Q201	Q103, QA01, QA02	Q202, Q203, Q207	Q204	Q205, Q206, QA03	Q301	Q302, Q303	Q401	Q701	Q801 ~ Q804	Q805	Q806, Q807
H110033020 LN05289	HF200551D0 2SK55D	HT310471C0 2SC1047(C)	HT308291D0 2SC829(C)	QK04 ~ QK12 HD200160 30 DS448	HC10025010 HA11211	HD10003032 1S188	HC10024060 μPC1161C	QK03 HT309452B0 2SC945Q or P	HC10013370 TL4558BP	HC10090030 STK4833	H020009290 S2V-20	HT412652A0 2SD1265(P,Q)	H030027090 WZ-140

QK01	QX01	QX02 ~ QX06 QX08 ~ QX10	QX07
HC10031020 AN6135	HC10003320 IR2E11	H110030020 LN224RP	H110031020 LN324GP



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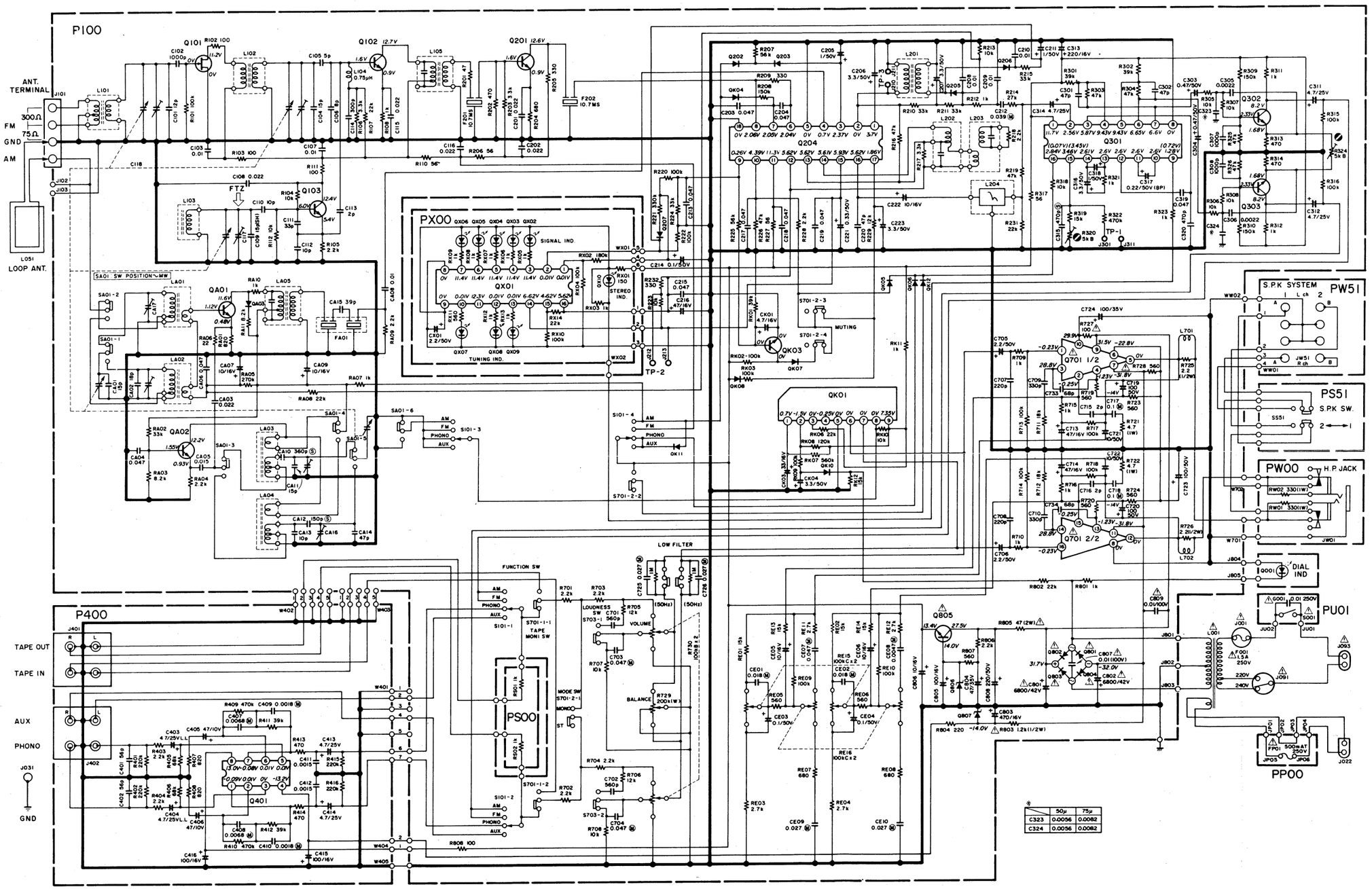
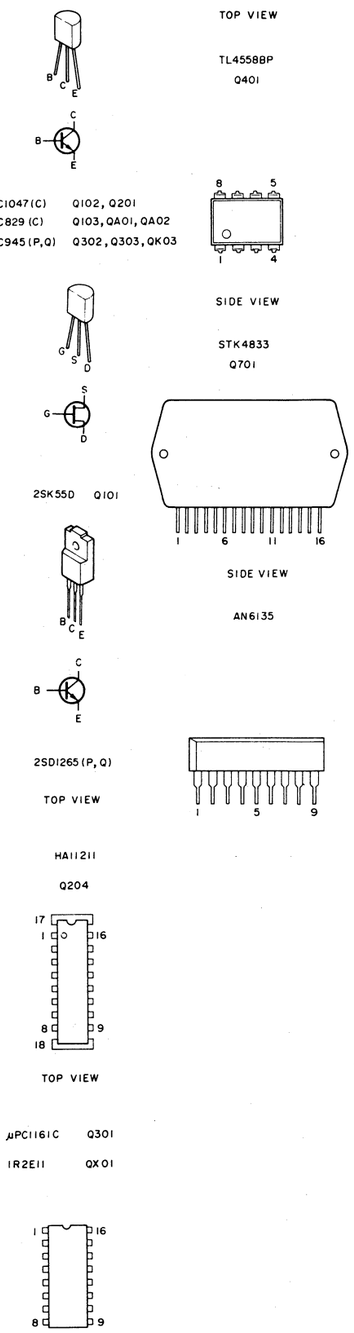
Components and wiring are subject to change for modification without notice.

Model SR325L

Q001	Q101	Q102, Q201	Q103, QA01, QA02	Q202, Q203, Q207	Q204	Q205, Q206, QA03	Q301	Q302, Q303	Q401	Q701	Q801 ~ Q804	Q805	Q806, Q807
H110033020 LN05289	HF200551D0 2SK55D	HT310471C0 2SC1047(C)	HT308291C0 2SC829(C)	QK04 ~ QK12 HD20016030 DS448	HC10025010 HA11211	HD10003032 IS188	HC10024060 μPC1161C	QK03 HT309452B0 2SC945Q or R	HC10013370 TL4558BP	HC10090030 STK4833	HD20009290 S2V-20	HT412652A0 2SD1265(P,Q)	HD30027090 WZ-140

QK01	QX01	QX02 ~ QX06 QX08 ~ QX10	QX07
HC10031020 AN6135	HC10003320 IR2E11	H110030020 LN224RP	H110031020 LN324GP





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